

Introducing

VicSoft



from

commodore
COMPUTER

STARTER PACK
SPECIAL



AND COMMODORE

WELCOME TO VICSOFT

VICSOFT is Commodore's own Club for VIC users. May we take this opportunity of thanking you for purchasing a VIC computer, and to welcome you to the rapidly expanding world of the VIC. When you registered your VIC guarantee with Commodore you became eligible for membership in the VICSOFT club.

THE VICSOFT CATALOGUE

Every VIC 20 owner will receive the VICSOFT catalogue four times a year. In addition to offering you all the latest products to use with your VIC computer, each issue will contain hints, tips and information that will add to your understanding and enjoyment of the VIC computer. The catalogue is designed so that you can leisurely peruse the best of a vast range of VIC products on offer — products that have been selected for two reasons: Top quality and value for money.

As you browse through VICSOFT you will see that it is worthy of a place on your bookshelf.

THE VICSOFT CLUB

VIC users joining the VICSOFT Club have the opportunity to take advantage of the generous members' discounts on selected products in each catalogue. The annual subscription to VICSOFT is only £5.00 As an introductory offer, if you join, a VIC Dust Cover will be sent to you absolutely free. You will find the application for membership at the back of this catalogue. JOIN TODAY!

Future issues of the catalogue will contain additional special offers which will be available to members. These will include Computer Camps — Competitions — Training Courses — Visits to Computer Fairs, Exhibitions, etc. — all at special members' prices — PLUS VICSOFT members will also be given the first opportunity to purchase many new VIC 20 products as they are introduced by Commodore.

JOIN THE VICSOFT
CLUB NOW

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ORDERING FROM THIS CATALOGUE

Members and non-members can order products from this catalogue using the special order form at the back of this catalogue. Providing you enclose your membership form and fee, you are entitled to take advantage of the Members' Special Offers featured in this catalogue. Your membership card will be forwarded to you by return.

Barclaycard and Access card holders may order immediately by telephone (0753) 73638 (24 hours a day ordering service). You can even join VICSOFT by ringing our order phone. DON'T MISS OUT! JOIN TODAY!

VicSoft

NEW COMMODORE ROM CARTRIDGES

MENAGERIE (VS 1926)

Four fleas are trying to get home. To do so, they must first swim across a river avoiding the ferocious flea-eating crocodiles and then complete their journey by hopping on and off the backs of passing rabbits, dogs and elephants. If a flea falls off, he is squashed underfoot.

When a flea reaches his home base, the next flea must be guided across. When four home bases have been filled, you must help another four fleas across this dangerous divide.

Can be played from the keyboard or with a joystick.



COSMIC CRUNCHER (VS 1922)

Your mission is to manoeuvre a 'Cosmic Cruncher' space ship through the universe avoiding contact with the vast array of roving satellites which have been sent to intercept and destroy you. If you hit a satellite, your starship is destroyed and you are returned to base. At the start of the game you have three ships at your disposal.

To help you in your task, a number of space stations have been positioned at strategic locations throughout the galaxies. These supply you with the power you need to destroy the alien satellites. But be very careful! This power is extremely limited.

As you progress through the galaxies, different planets appear and you can increase your score by passing through their orbits. If you reach 10000 points, another Cosmic Cruncher is added to your fleet.

Can be played from the keyboard or with a joystick.



Order on pages 51 and 52

COSMIC JAILBREAK (VS 1927)

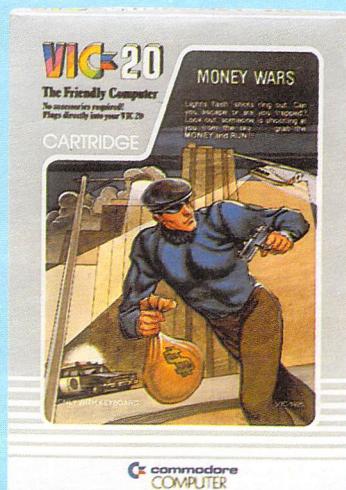
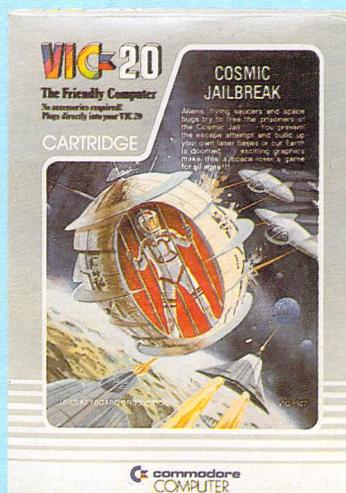
Because of the recent increase in space crime, a high-security prison has been set up in the far reaches of the galaxy. You are the jailer.

The location of the prison has been discovered by an alien planet which has despatched a fleet of space ships and cosmic bugs. Their task is to break down the walls of the prison and free its occupants.

Armed initially with three high-powered lasers, you must destroy the invaders before they can reach their comrades and effect an escape. But keep out of the way of the alien bombs! If a bomb hits you or the bugs free one of the three prisoners, you lose a laser. Bonus lasers are awarded for each 2000 points. Watch out especially for the infamous alien 'chorus line' and the deadly meteor shower!

Can be played from the keyboard or with a joystick.

(This game was developed in the United Kingdom).



MONEY WARS (VS 1925)

Grab as much money as you can but watch out for the stinging arrows! You can avoid them by hiding behind a wall or using your force field. If an arrow hits you, you are turned into a skeleton and then an angel as you float gently upwards to a better place! Each arrow that hits a wall dislodges a brick and exposes you to more danger.

You have three lives. If you succeed in retrieving five money bags in a row, you receive an extra bonus and the protective walls are rebuilt.

Played from the keyboard. Other COMMODORE ROM games include: Gorf (VS 1923), Omega Race (VS 1924), Super Lander (VS 1907), and many others.

VicSoft

LEARN BASIC

AN INTRODUCTION TO BASIC — PART 1 (VS 2501)

This book is Part 1 of a two part course designed to train the novice computer user in every aspect of BASIC programming on the VIC 20. This first part of the course covers the elementary aspects of BASIC so that by the end of the book the user can write useful, well designed BASIC programs.

The course is divided into individual units, each of which covers one aspect of BASIC programming. To help the learning process, INTRODUCTION TO BASIC — PART 1 includes two cassette tapes which contain example programs, questionnaires on each topic covered in the book, and a stencil for drawing flow diagrams.

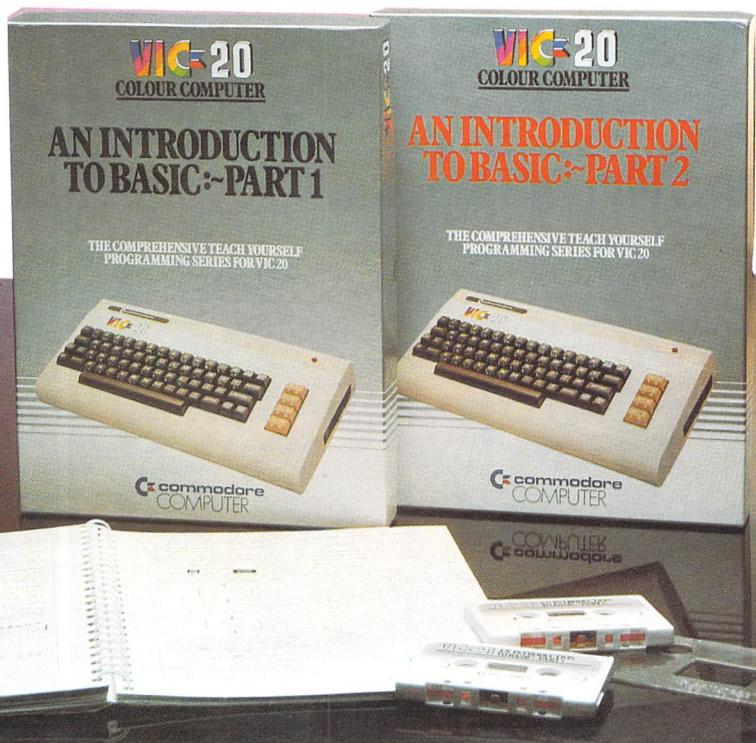
AN INTRODUCTION TO BASIC — PART 2 (VS 2502)

This book is the second part of the course above. It builds on the knowledge gained from AN INTRODUCTION TO BASIC — PART 1 so that, by the end of the course, the user will be able to write advanced BASIC programs incorporating all the attributes of the VIC 20 computer.

AN INTRODUCTION TO BASIC — PART 2 explores the world of

subroutines, graphics, sound and the VIC's memory locations to enable the user to write more complex and powerful programs.

As in PART 1, this course is also divided into individual units, each of which covers one aspect of BASIC programming. To help the learner progress, two cassette tapes containing example programs and questionnaires are also included.



Order on pages 51 and 52.



PROGRAMMER AIDS

SUPER EXPANDER

CARTRIDGE (VS 1211A)

The VIC Super Expander adds new colours, new sets of graphics and an enlarged music writing potential to the VIC 20. No longer is it necessary to access memory locations in the VIC to perform these tasks.

Eight simple BASIC-type commands, such as CIRCLE, DRAW, and PAINT enable shapes to be created and filled in with one of fifteen colours via the cartridge. There are eleven music-writing commands which can be used to compose and play music using chords or single notes in a five octave range. Seven read functions are included in the cartridge

enabling the programmer to determine the values contained in various VIC memory locations. In addition, the four function keys are programmable which speeds up program writing. The cartridge also contains an extra 3K of memory (RAM).

PROGRAMMER'S AID

CARTRIDGE (VS 1212)

The VIC 20 Programmer's Aid Cartridge is designed to help both new and experienced BASIC programmers to write, edit and debug programs quickly and easily. Automatic program-line numbering and error highlighting are just two of the fifteen commands supplied by the cartridge. Other commands available include RENUMBER, FIND, DELETE and MERGE.

Programmer's aid is also valuable as a diagnostic and debugging tool. The command HELP displays the line where an error occurred. The

command DUMP will display the values of all non-array program variables. The commands STEP and TRACE enable the programmer to view program line numbers as the program is being executed.

Can be used with the standard VIC or in conjunction with extra memory (RAM) in a VIC expansion board.

MACHINE CODE MONITOR

CARTRIDGE (VS 1213)

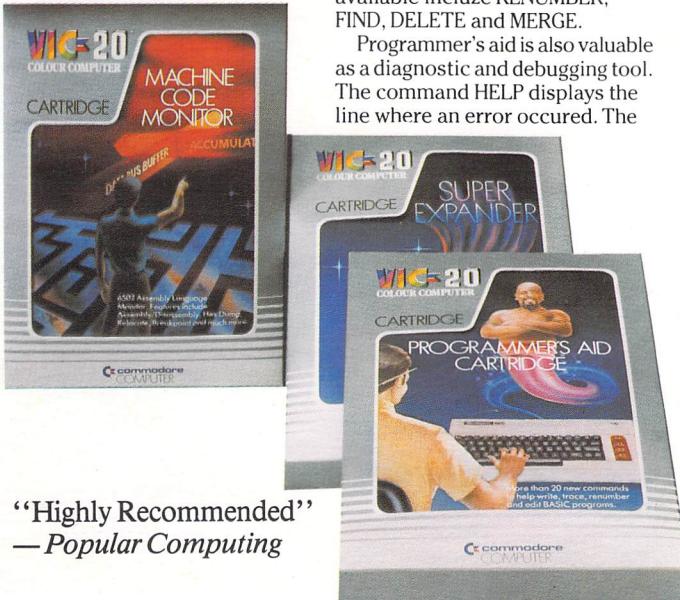
The Machine Code Monitor is an invaluable tool for people who wish to write 6502 assembly language programs on the VIC 20 computer. The monitor provides eighteen commands to aid in inputting and debugging these.

Main features include an ASSEMBLE command to make code typing a more simple process. When a program has been entered, VICMON offers three speed options for running the program. These are WALK, QUICK TRACE and GO.

Additional commands in the monitor include exit to BASIC, save to or load from cassette or diskette, disassemble blocks of memory and the NUMBER command.

In general the commands are specified by a single alphabetic character and command parameters, if required. The parameters may be address(es), op codes, operands, values, data, etc.

The Machine Code Monitor Cartridge plugs into the VIC expansion port or into a memory expansion board and may be used with additional RAM.



"Highly Recommended"
— Popular Computing

Order on pages 51 and 52.



AUDIOGENIC

AMOK (VS 0404)

The halls of AMOK are populated by robots out of control and out to get you. To save yourself you must be quick on the draw and fast on your feet. One of the best games for the unexpanded VIC!

BONZO (VS 0400)

A great best selling game, featuring brilliant full-screen graphics and some of the most intelligent and devious monsters you have ever tried to avoid! Move the Workman (complete with overalls and cap!) up and down the ladders and pick up the boxes from the different levels, but beware of the Bonzos! Requires 8K expansion.

MANGROVE (VS 0444)

A totally original game idea — you must move around the screen building up a body of cells which are attacked by deadly microbes. Very fast action game for the unexpanded VIC!,

SEAWOLF-BOUNCE

OUT-VIC TRAP (VS 0412)

SEAWOLF ... You are a submarine and you have to sink as many enemy ships as possible in 60 seconds. BOUNCE OUT ... A battle between you and the VIC. Try to cross the screen whilst enticing the VIC to cross your path to score extra points.

GRANDMASTER

(VS 0441)

The chess program that beats all comers! Apart from being the strongest micro chess program, Grandmaster has these amazing facilities ...

- * Square board for easy visualisation of moves.
- * 10 levels of play.
- * Hint function.
- * Force Grandmaster to make the move it is considering.
- * Automatic queening, castling and en passant.
- * Choice of colour scheme for user friendliness.
- * Change level.
- * Take back moves.
- * Start new game with reversed colours.
- * Automatic self play.

Grandmaster comes on cassette in a presentation box with full manual. Requires 8K expansion.

BLOCKADE (VS 0403)

Blockade is the latest machine code game of strategy for the unexpanded VIC. The rules are simple, but you'll have to keep your wits about you to beat the VIC! You have a grid of nine rows of nine squares, and you play like noughts and crosses except that you have to get a line of five squares and stop the VIC from doing the same. The game features sound effects and full joystick control.

GOLF (VS 0416)

At last — Golf in the privacy of your own home! Set your handicap and tee off — with choice of clubs and nine different holes with hazards, bunkers, water, etc. About the only thing it doesn't do is serve drinks in the clubhouse afterwards! Requires 3K or 8K expansion.

APPLE PANIC (VS 0442)

Control the little man trapped in a maze of ladders. He has to try to kill off the dreaded Apple monsters before they get him. He must dig a hole, wait for them to fall in and then hit them on the head. With great graphics this game provides a nice laid-back alternative to hectic shoot-em-up games!

SERPENTINE (VS 0443)

A brilliant game concept. You control a snake which has to move through a maze to eat the frogs that appear in random positions. You must avoid the other snakes in the maze until you have eaten enough frogs so that you grow big enough to eat the other snakes. To complicate matters both you and the other snakes can lay eggs which hatch into new ones. If you manage to eat the snakes you get a new maze with a different layout. In fact there are 20 different maze designs built into the program. Great graphic snake-like movement!

SATELLITES AND

METEORITES (VS 0425)

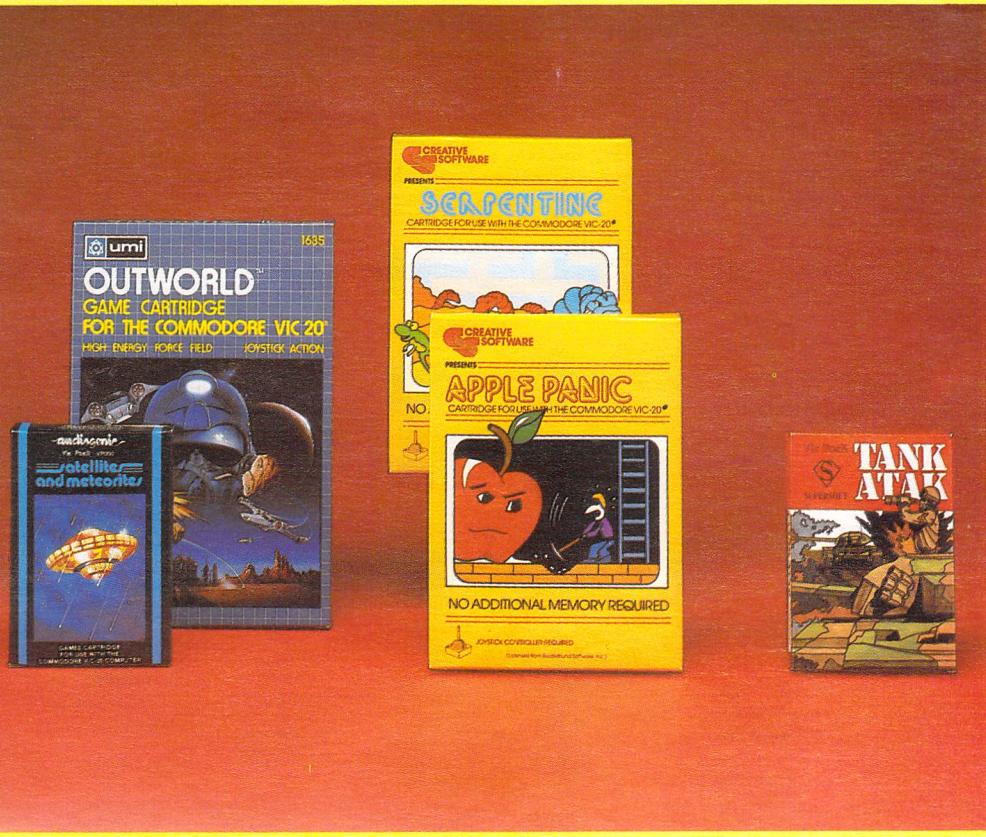
The best VIC asteroids-type game ever! A graphically brilliant version of the famous Arcade game, with a thrilling new hazard — the Black Hole! Plus — It uses the full screen area! No more borders — the final frontier overcome!

TANK ATAK (VS 0420)

Latest report from the Battle Zone — You are stranded in a desolate plain, commander of the only tank left to hold off the advancing enemy tanks and missiles. Your radar helps you to be ready to strike first as soon as the enemy is in range, but accuracy is essential — you'll only get time for one shot!

OUTWORLD (VS 0421)

The lights of the beautiful city of Outworld blink invitingly. But life in Outworld is no party! The laser base must be manned constantly to blast the meteorites, alien saucers and bombs which threaten the city. One lapse of concentration and the city is doomed. This cartridge pack features ten playing levels and graphics that set new standards in games programming!





AUDIOGENIC

Household and Educational Packages from VIC Pack

WORDCRAFT 20 (VS0431)

Written in 100% machine code, and is derived from the famous Wordcraft 80.

Incorporates state-of-the-art facilities ...

- * Text up to 99 columns wide. The screen is a window on the text and scrolls left, right, up and down. Or you can write in 23 columns and expand the column width before printout with one easy command-
- * Full text control — margins, document width, tabs, decimal tabs, justification, centreing.
- * Full text manipulation — on-screen editing, moving blocks, search and replace, underlining and embolding.
- * Full compatibility with CBM printer, Centronics parallel and RS232C serial printers.
- * What-you-see-is-what-you-get display uncluttered by control characters.
- * Name and address capabilities with document merging facilities (ideal for mailing lists!)
- * Compatible with Wordcraft 80. Use the VIC at home — read into the office system.
- * Files on either tape or disk.

WORDCRAFT 20 (VS 0432) (without memory)

HOUSEHOLD FINANCE (VS 0429)

This useful program could save you money! By keeping track of your household expenses you can plan your budget efficiently. Your expenses can be categorised so that you can see your expenditure in any area. Full documentation. Runs on unexpanded VIC!

LOAN ANALYZER (VS 0428)

How long shall I have to pay for my house? Is my car dealer a shark? With this well conceived program you can keep track of your mortgage or loan. Enter three of the four parameters, Loan Amount, Monthly Payment, Term of Loan, and Annual Rate of Interest, and the program calculates the other. Also displays full amortization tables. Program comes with full documentation. Runs on unexpanded VIC!

CASTLEMATH (VS 0440)

Castlemath is the ultimate maths educational program for children. Requires 16K memory expansion, this graphical mathematical adventure game takes place in the corridors of the castle. To enter, you must answer questions set by the Mad Maths Master, next various creatures will give you sums to solve. You can choose the type of sums, and length of game — a long game lasts an hour. Superb animation and strong audio-visual cues ensure that interest is sustained. At intervals unexpected things happen to vary the action. This brilliantly conceived program has kids practising maths without even noticing!

HOME OFFICE (VS 0433)

The Home Office gives you two useful programs for the price of one!

VICPRO word processing incorporating justification, tabbing, choice of page width, line editing and more! You can type at full speed (with some rival programs you must wait for the program to catch up!) Designed for use with VIC printer only, and aimed at users who do not need sophisticated facilities of Wordcraft 20.

VICDATA A highly sophisticated database program for fast data retrieval (typically less than a second), versatile search facility, and hard copy on VIC printer. The two programs will handle most tasks in your Home Office for a fraction of the price of the competition! 8K expansion required. Files can be saved to tape or disk with full documentation.

SKYMATH (VS 0427)

Specially for young children! Addition and subtraction problems with an entertaining audio-visual presentation. Two radar telescopes display the sum on screen. You type in the answer — get it wrong and a saucer comes along and blasts the figures away. Clever sound and graphics provide the incentive to learn. Requires either 3K or 8K expansion.

Programming Aids and Languages from VIC Pack.

BUTI PLUS (VS 0430)

BUTI (pronounced "beauty") stands for Basic Utility cartridge. The most powerful VIC programmer's toolkit ROM available. Features automatic error catching (i.e. the line with a program error is automatically displayed with the error highlighted), plus 17 other commands to take the misery out of Basic programming ...

APPEND — EDIT — OFF — TRACE — AUTO — FIND — RENUMBER — UNNEW — DELETE — HELP — REPEAT — # (dec to hex) — DUMP — KILL — STEP — \$ (hex to dec)

Also, a special "VIC" command simulates the standard, +3K, and +8K memory configurations. With BUTI Plus we don't just give you the best Basic aids — we include the Audiogenic Monitor! You can now easily write, debug and execute machine code programs on the VIC. The Monitor is completely transparent to other programs, its uncluttered display makes it a joy to work with, and it features these powerful commands ...

Assemble, Fill, Hunt, Load, Save, Modify memory, Disassemble, Execute code, Register Display, Quick execute, Transfer bytes, Centronics interface, Memory display, Continuous disassemble, Step through code, Exit, Modify register.

An exciting and innovative feature of the Audiogenic Monitor is the inclusion of a Centronics parallel printer interface which allows the VIC to directly interface, via the user port, with many types of high quality printer such as the popular EPSON MX80, by means of a

simple cable, VP075, available from Audiogenic.

You also get a FREE 3K extra memory!

AUDIOGENIC MONITOR

(VS 0434)

If you don't need the Basic Aids or memory, then you can buy the Monitor in its own cartridge.

MIKRO ASSEMBLER (VS 0439)

From Supersoft comes this VIC version of the Mikro assembler, a powerful cartridge with full documentation, a best seller in its PET version. You write Source Code on Basic lines, which can be manipulated by the included toolkit commands. Uses the colour of the VIC to display the formatted code in a very readable way. Hard copy is formatted into five columns. Uses standard MOS mnemonics, and features the Assembler and Disassembler, plus TIM monitor commands and decimal, hex, octal and binary number convertor. Includes special commands which simplify Basic programming of high-res colour graphics, sound and joystick.

MINIKIT (VS 0415)

If you don't need the sophisticated facilities Minikit is the low cost alternative to BUTI. This powerful cassette for VICs of any memory size automatically relocates to the top of memory taking up about 1K. Allows you to enter the common Basic keywords with one keystroke. Provides toolkit commands including Find, Kill, Delete, Auto and Trace.

FORTH (VS 0436)

(with memory)

Audiogenic joins the Forth revolution with this cartridge written by our Dave Middleton. The best VIC Forth yet, contains all the standard Forth commands plus VIC related colour and sound extensions. Includes a comprehensive manual and supports both tape and disk. Audiogenic Forth has superior features, i.e. Full error messages (instead of codes). Very powerful screen compression algorithms. Scrolling screen editor. Contains a built in 3K memory expansion

FORTH (VS 0437)

(without memory)

As above but requires a minimum of 8K expansion RAM.

SUPER SCREEN (VS 0445)

40 columns in colour on the VIC??!! Now it can be done without expensive hardware. This machine code program loads and relocates to the top of memory, allowing you to write programs with 40 column display. The full VIC character set is retained as are the screen editing controls. However pokes to the screen and colour memory are not possible — Requires 8K expansion, but you have 5K left for your program.

CENTRONICS INTERFACE CASSETTE

(VS 0438)

Centronics interface software is available on its own on cassette, VP077. The program relocates at the top of memory and takes up less than 200 bytes! Load your program underneath and print out on a parallel printer instead of the VIC 1515!



EDUCATION SOFTWARE

FROM COMMODORE/IVAN BERG

The TEACH AND TEST series FOR AGES 5 TO 8

The TEACH AND TEST series has been designed to test the reading and arithmetic skills of children in the 5 to 8 years age group.

Four packages are included in the series: ALPHABET, VOCABULARY, ARITHMETIC 1 and ARITHMETIC 2. Each package contains a teaching section and various tests on what has been covered. Some of these tests take the form of games, so that the child can learn as he is playing. Each package makes extensive use of the

graphics and sound features of the VS 20 to assist parents in the teaching process.

All of the packages below require the use of an 8K or 16K Memory Expansion cartridge. Several cassette programs are in each package.

VOCABULARY (VS 3431)

VOCABULARY is aimed at increasing your child's word power. It does so by displaying labelled pictures of familiar objects and then asking the child to enter the word associated with each part of the picture.

ARITHMETIC 1 (VS 3432)

This package is designed to teach your child how to do simple addition and subtraction using the numbers from zero to ten.

ARITHMETIC 2 (VS 3433)

ARITHMETIC 2 introduces the child to simple multiplication and division.

The TEST YOUR CHILD series FOR AGES 8 TO 11

The TEST YOUR CHILD series is designed for children in the 8 to 11 years age group.

The topics included in the series are: ARITHMETIC, READING, GENERAL KNOWLEDGE, SPELLING 1 and SPELLING 2. The programs are in the form of tests, the score appearing at the conclusion of each exercise.

All of the packages below require the use of an 8K or 16K Memory Expansion cartridge. Several cassette programme are in each package.

ARITHMETIC (VS 3434)

This package is aimed at testing your child's arithmetic powers. Subjects covered include: addition, subtraction, multiplication, one line and long division, fractions and decimal numbers. A Problems section tests all of the subjects learned.

READING (VS 3435)

READING is designed to test your child's literacy ability. It covers subjects ranging from the use of simple words to elementary reading exercises.

GENERAL KNOWLEDGE (VS 3436)

This package is in the form of a number of quizzes covering both general knowledge and nine specialist subjects. These include: History, Geography, Science, Sports, Food and Drink, People, Books, Travel and Nature. A score is given at the end of each quiz.

SPELLING 1 (VS 3437) and SPELLING 2 (VS 3438)

These packages test the spelling capabilities of your child. This is done by asking the child to identify and correct text where words have been incorrectly spelt and solve easy to understand crossword puzzles.

GCE REVISION FOR OLDER STUDENTS

Requires an 8K or 16K memory expansion

Two new GCE revision programs have been added to this popular line of education aids.

Now **History** (VS 3409) and **Geography** (VS 3408) join the range of subjects already available which cover English Language, Mathematics (2 packs), Biology, Physics and Chemistry.

Prepared by text book authors and teachers these VIC 20 programs are designed to test the students knowledge of his subject. To prevent learning the tests, the questions are randomised, making the cassettes re-usable many times. Weak areas requiring further study are clearly indicated and are shown in the full results of each test by means of bar charts.



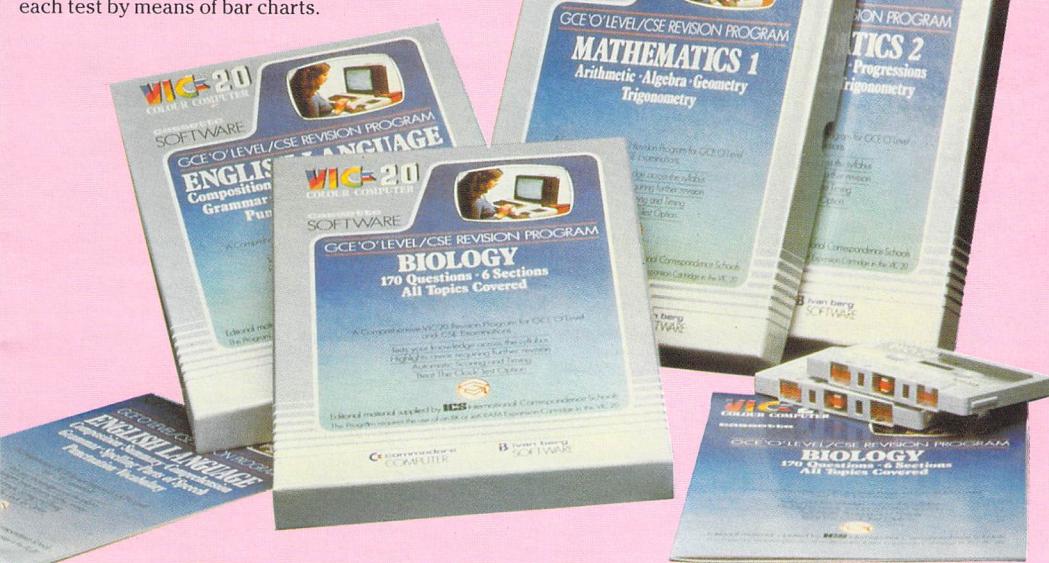
Super Expander or 3K RAM?

It is possible with a couple of SYS calls to switch off the Super Expander. The procedure is as follows:-

SYS 64850 This disables the function key definitions.
SYS 58232 This disables the extra commands.

If you wish to turn your Super Expander into a 3K RAM pack (as a temporary measure) the second SYS is not needed and should be replaced by:-

POKE641,0: POKE642,4:
POKE643,0: POKE644,30:
POKE648,30: SYS64824



Order on pages 51 and 52.



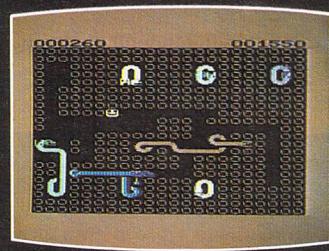
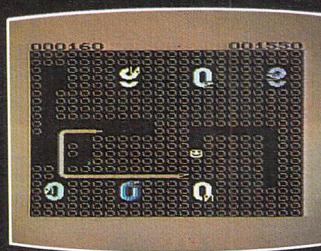
POSTERN

Imaginations Unlimited

with these electronic contests designed to develop **lightning-fast reflexes**
For VIC UNEXPANDED — Suitable for children from four to 84

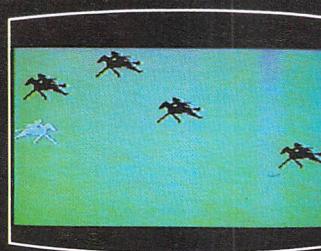
SNAKE PIT (VS 0563)

Imagine yourself in a snake pit.
The snakes and their eggs must be gobbled up before the snakes eat the Gobbler ... who must eat the last egg before the first snake. Eat the eggs, and more snakes are freed to attack. Eat all the snakes and the game begins again ... but faster! Faster! A bigger challenge than PACMAN.



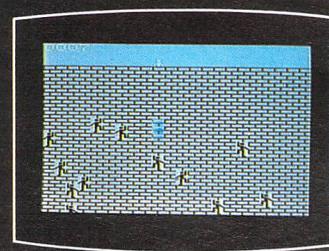
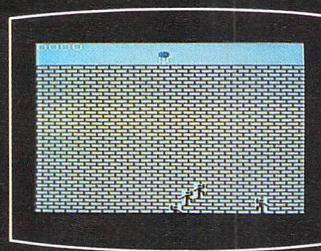
SHADOWFAX (VS 0561)

Fight the black riders whose touch is death. You must guide SHADOWFAX! as Gandalf's swift white horse braves the dreaded riders of Sauron, Dark Lord of Mordor. How many will your thunderbolts destroy? Magnificent graphics.



SIEGE (VS 0562)

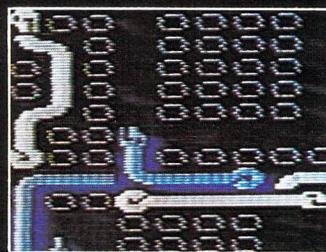
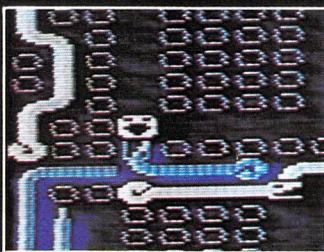
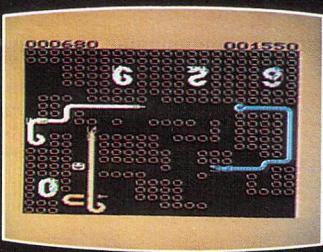
Watchfulness and skill protect your castle from the encircling marauders in this SIEGE. Drop rocks to dislodge them, and their anger makes them faster ... and faster! Are you fast enough to hold them back from the top of the wall? Spend your reflexes.



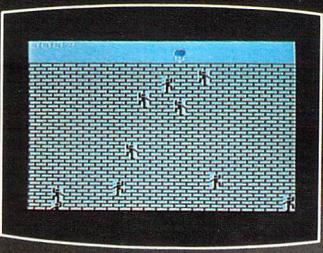
These are the first of the new **Imaginations Unlimited** range of games that will grip your imagination and challenge your abilities.

Look for the **IMAGINATIONS UNLIMITED** symbol — the sign of super graphics — offering you a real challenge!

On VIC CASSETTE with full loading instructions for unexpanded VIC.



POSTERN
*Imaginations
Unlimited*





LIBRARY

MASTERING THE VIC 20

(VS 0950)

This book is designed to teach you how to get the most from your VIC 20. It includes instructions both on BASIC and machine code programming. Although the book is intended for the more experienced programmer, even the novice will find it friendly and informative. Many useful routines are included in the book including utilising the 6561 video chip, how to generate a 'second screen', programming sound on the VIC, and much more. These together with extensive memory maps for the expanded and unexpanded VIC make the book an essential reference for the serious VIC 20 programmer.

VIC 20 FOR CHILDREN

(VS 0951)

A more elementary book designed principally for the younger child. It includes many sample programs and routines especially designed to encourage children to experiment with the computer.

LEARN COMPUTER PROGRAMMING WITH COMMODORE VIC (VS 2801)

This book provides a practical grounding in BASIC, the most widely-used microcomputer programming language. Using the Commodore VIC, the authors explain how to write, develop and test BASIC programs. Many different applications of the VIC, ranging from colour and sound animations to scientific and business applications, are described.

A comprehensive series of exercises, with answers, is provided to help you learn at your own pace.

PROGRAMMER'S REFERENCE GUIDE

(VS 2803)

Whether you are a complete beginner or an advanced programmer, this is the book for you. All aspects of both BASIC and Machine Language programming are covered together with tips to help you gain the most use from your VIC 20.

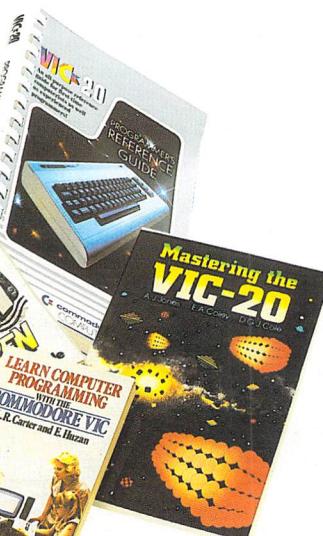
For the beginner, the book contains a description of each BASIC command together with example programs to illustrate what the command does. For those who wish to begin Machine Code programming, the Programmer's Reference Guide introduces the concepts in layman's terms. An example of each Machine Code instruction is given with an explanation to help you expand your knowledge as you progress through the book.

For the advanced programmer, the Programmer's Reference Guide has a comprehensive

VIC 20 memory map and points out some useful memory locations. A list of the VIC KERNEL entry points is also given so that you may use these routines to help in the production of more efficient machine code. This book will help you maximise the potential of your machine.

BLANK PROGRAMMING CASSETTES (VS 2505)

VIC owners will soon be writing their own software programs and Commodore have produced high quality C12 blank cassettes which are ideal for recording and saving your own programs.



Order on pages 51 and 52.



GORTEK

**START
PROGRAMMING
WITH GORTEK
AND THE
MICROCHIPS (VS 0904)**

This delightful product is a unique concept in teaching young people to program and couples a space adventure story with the lessons. Gortek teaches your child the fundamentals of BASIC as he prepares the Microchips to ward off an attack by the fearsome Zitrons! Package includes:

- Over 40 page full colour story/training book.
- Eleven cassette programs for the unexpanded VIC including educational games.
- A Gortek badge.

This product was especially designed for junior school children and above by three educators from Hampshire and is suitable for classroom as well as home use.



BUBBLE BUS

are proud to bring you new exciting, top quality games for your VIC-20.

SAD FACES (VS 0295)

Needs no memory expansion — requires joystick.

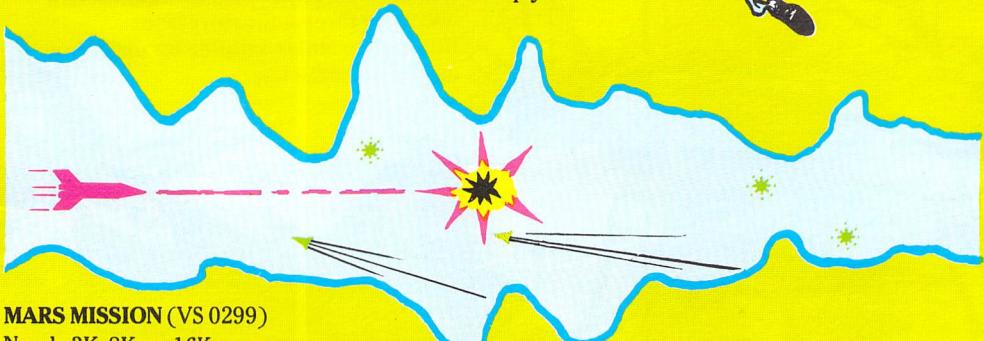
Here's a fast paced game that'll keep you hopping back for more. As you work your way up and down the levels catching the falling objects, you are constantly aware that one mistake, and you could fall down into the deadly spikes.



3D MAN (VS 0303)

Needs 3K, 8K, or 16K memory expansion — requires joystick.

Using the joystick for movement your goals are to (a) eat all the dots in the maze, and (b) not to get eaten by the monsters that inhabit the maze. Use the radar scanner to help you.



MARS MISSION (VS 0299)

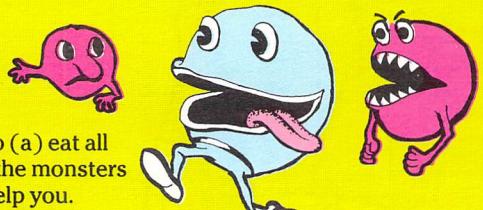
Needs 3K, 8K, or 16K memory expansion — requires joystick.

Descend into the caverns on your daring mission to destroy the Alien base. You must avoid treacherous rock formation, space mines and enemy rockets in your quest.

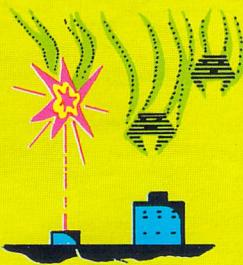
KRAZY KONG (VS 0294)

Needs no memory expansion — uses joystick or keys.

The famous pub game now on the VIC-20. The Krazy Gorilla has taken three fair Maidens, up to the top of the giant stairway and you (being the valiant hero you are!) will attempt to rescue them at the risk of your own life, by jumping the steps and the rolling barrels, using your joystick.



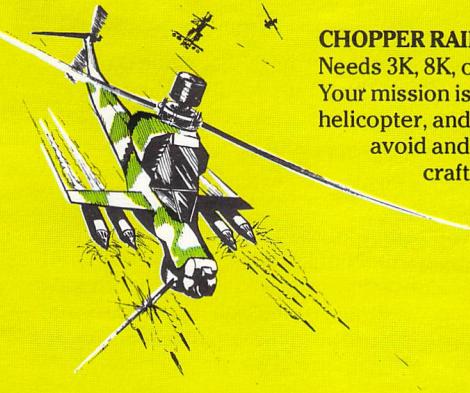
VicSoft



ALIEN PLAGUE (VS 0306)

Needs 3K, 8K, or 16K memory expansion — requires joystick. The greedy Aliens have launched a

surprise attack against Earth. You must defend the Earth's remaining power cells as best you can.



CHOPPER RAID (VS 0300)

Needs 3K, 8K, or 16K memory expansion — requires joystick. Your mission is to fly over the enemy territory in your helicopter, and destroy their ground installations. You must avoid and destroy the interceptor missiles and attack craft, which will try to stop you.

MONEYBAGS (VS 0298)

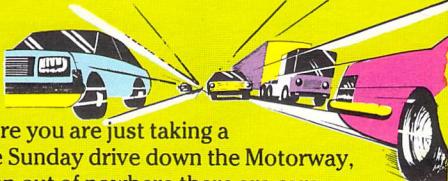
Needs 3K, 8K, or 16K memory expansion — requires joystick.

The object of the game is to find as many of the 18 moneybags as you can, while avoiding the deadly blobs. You must pick up fuel as you go from room to room.



MOTORWAY (VS 0297)

Needs no memory expansion — requires joystick.



There you are just taking a nice Sunday drive down the Motorway, when out of nowhere there are cars, hundreds of cars, and they're all heading for you! You can do your best to dodge them but it's doubtful you'll survive!



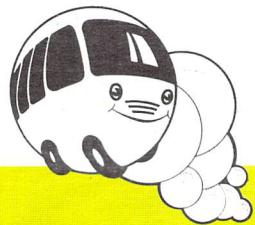
ALIEN PANIC (VS 0302)

Needs no memory expansion — requires joystick.

It's chasing you, run ... no, it's turned around, but you had better not rest, you're fighting against time, so turn around and dig a trap, but hurry the alien has his sights on you!



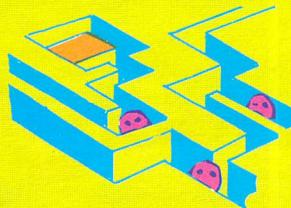
BUBBLE BUS



REACTOR (VS 0307)

Needs 3K, 8K, or 16K memory expansion — requires joystick

Do your best to stop the Gremlins destroying the Nuclear Reactor. Hunt them through a maze and defeat them with your laser and Smart Bombs.



DEFENDER (VS 0304)

Needs 3K, 8K, or 16K memory expansion — requires joystick.

Your mission is to save the innocent civilians from the marauding Aliens. You have 20 civilians, and each time you hear the two tones, you've lost one. The end is inevitable, but

you must fight regardless. The game is over when all your ships are destroyed and the civilians are gone.



CAVERN RUN (VS 0296)

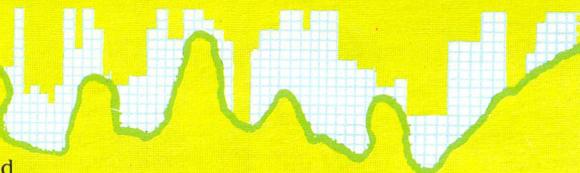
Needs no memory expansion — requires joystick.

You're on a journey into the depths of a cavern that until now has been unexplored. Scientists have also calculated that there should be enough fuel deposits on the way in to keep the ship alive. It's all up to the pilot!

VALLEY BOMBER (VS 0301)

Needs no memory expansion — uses joystick or keys.

You are in charge of three different aircraft on a mission to clear out a canyon. You must pick your target carefully, and drop your bombs quickly and accurately to avoid wasting precious time.



Order on pages 51 and 52.

VicSoft

McDOWELL KNAGG

DESK (VS 0475)

LEGS (VS 0476)

THE CDS MICRO TIDY

* SECURE — The whole unit is lockable

* SPACIOUS — Ample space for cassettes, cartridges and books

* STURDY — Built to last

- * STAND ALONE — Legs are available as an optional extra
- * TIDY — Cables, connectors and power blocks are stored out of sight
- * COMPACT — Work table slides away with micro and cassette deck
- * VERSATILE — Houses VIC 20,

CBM64 home computers.

* BRITISH — Manufactured and assembled completely in Britain.

MEASUREMENTS

Length	79cm
Width	42cm
Height (without legs)	16.5cm
(with legs)	85cm



RAM ELECTRONICS

RAMPACK 3K — (VS 0490)

RAMPACK 8K — (VS 0491)

RAMPACK 16K — (VS 0492)

RAMPACK 32K — (VS 0493)

EXPANSION CARTRIDGES
FROM RAM ELECTRONICS

A complete range of cartridges from Ram Electronics has recently been introduced covering the whole Commodore range and a brand new 32K super switched ram cartridge. The 3K and 8K rampacks are static ram cartridges, whilst the 16K switched and 32K switched ram cartridges are single rail dynamic ram devices. Our switched 16K RAM cartridge enables selection of either BLOCK 1 and BLOCK 2 or



BLOCK 2 and BLOCK 3, thus making it suitable for either a stand along 16K or to add to an 8K ram cartridge.

The 32K RAM cartridge allows you to fill all of the available useful memory expansion in your VIC 20 in one cartridge. This basically enables you to have BLOCKS 1-3 (24K) plus either high res 3K, (RAM 1-3) (3K) or BLOCK 5 8K. BLOCK 5 can very easily be used as a m/code program area, or for BASIC 'DATA' statements; by POKEing 65, 66, with the

appropriate values for BLOCK 5. Three switches on the rampack enable various blocks as required. Switch one controls BLOCK 1 – enabled or disabled. Switch two control RAM 1-3 or BLOCK 5 or off. Switch three controls BLOCK 3 – enabled or disabled. Note BLOCK 2 is always selected. This versatile cartridge therefore enables you to use a wide range of cartridges, whilst maintaining maximum use from your 32K ram-pack for expansion memory.

Order on pages 51 and 52.



STACK

PROGRAMMING AIDS ...

FROM VICKIT 1

(VS 0174) Cartridge

(VS 0158) — Rom

"HELP" is at hand for beginners ... so is AUTO and TRACE, FIND, DELETE, DUMP, OFF, RENUMBER, STEP.

With these simple-to-use commands, VICKIT 1 will take the donkey work out of programming. Each time you use it you'll save time and a lot of effort and make programming your VIC 20 much more fun!

*User Manual included.

THE BEST OF BOTH ... ON

VICKIT 2

(VS 0175) Cartridge

(VS 0159) — Rom

To give you the best value for money we've put together ... All the programming aids of VICKIT 1 *PLUS* the best of the VICKIT 3 super graphics commands making VICKIT 2 the most economical cartridge you've ever seen!

SUPER GRAPHICS ... FROM

VICKIT 3

(VS 0169) Cartridge

(VS 0168) — Rom

"Manoeuvre your spaceship (designed by you, livery chosen by you). Beware being hit, otherwise it's ... ZAP!! WHOOSH!! (explosions especially designed by you!) For the most exciting colour graphics around choose VICKIT 3. You'll get 20 easy-to-use commands to help you to create your very own super graphics ... and at a bargain price too!

*Includes VICKIT 3 SUPER GRAPHICS User Manual.

VICKIT 4

(VS 0171) Cartridge

(VS 0170) — Rom

HIGH-SPEED CASSETTE OPERATIONS *PLUS* MACHINE CODE MONITOR *PLUS* MACHINE CODE TOOL KIT

Tired of waiting around for your programs to SAVE or LOAD on

cassette? NOW with VICKIT 4 you can SAVE, LOAD or VERIFY all but the smallest programs at up to 7 times FASTER than before!

PLUS

Ever wondered about Machine Code programming? Well now is your chance to give it a try!

Part of the deal with VICKIT 4 is ... a MACHINE CODE MONITOR & TOOLKIT

For the more technically minded, features include:

- * Automatic line numbering of source code
- * Block Delete
- * Renumber source code
- * Comparison of two blocks of object code in memory
- * Machine language monitors.

HI-SPEED CASSETTE
OPERATION
SAVE... LOAD... VERIFY...

UP TO 7 TIMES
FASTER!

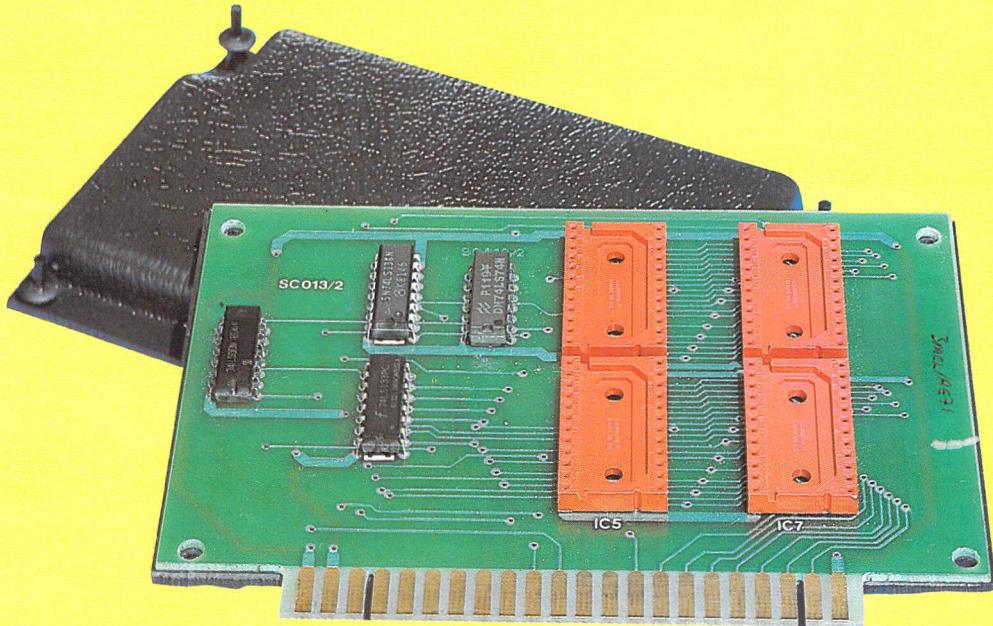
STACK

**NEW
LOWER
PRICES**

MULTI ROM CARRIER (VS 0176)

Save \$\$\$'s by using VICKITs (or other roms) on the economical MULTI ROM CARRIER.

Save expense of buying several cartridges ...
... simply pop your VICKIT into the sockets provided. Soon you'll have one cartridge with the power of FOUR!





STACK

VICKIT 5

(VS 0172) — Rom
(VS 0173) — Cartridge

A superior 6502 ASSEMBLER for machine code enthusiasts to help you produce FAST-RUNNING programs. VICKIT 5 removes the tedium from machine language programming by allowing you to write your code in a special form known as 6502 Assembler Language.

VICKIT 5 then performs all the laborious calculations normally associated with machine code.

Features include:

- * Symbol table listing
- * Full cross reference table
- * Printer support if needed

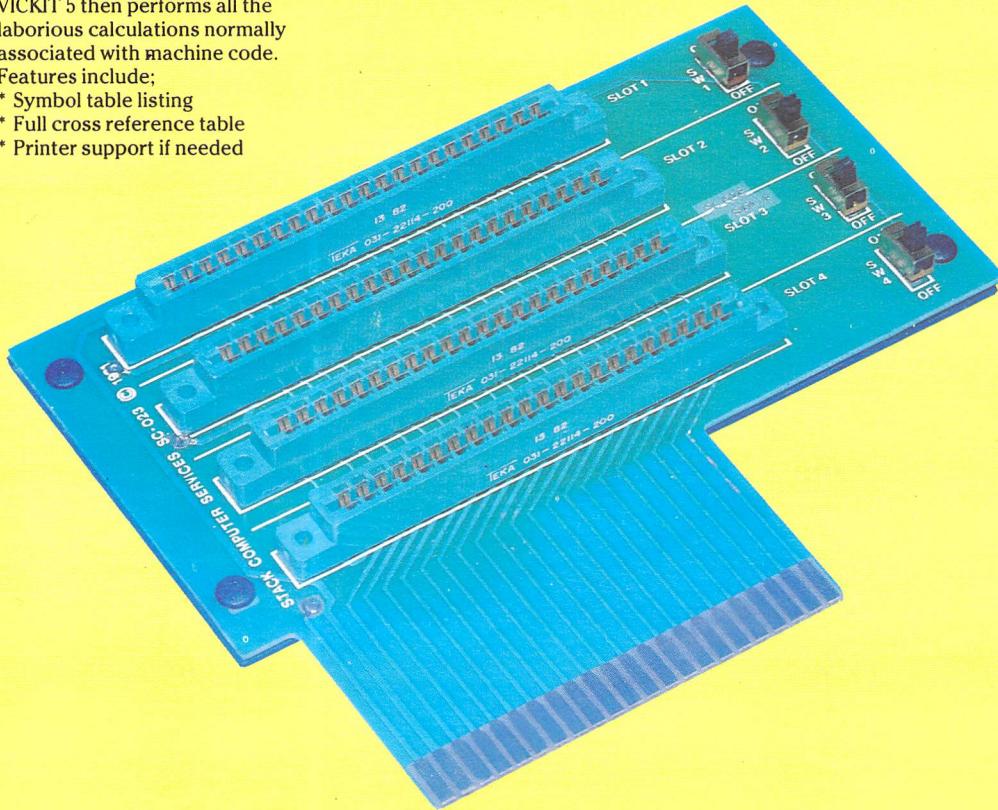
4 SLOT MOTHERBOARD

(VS 0167)

This popular multi-cartridge board has been redesigned to fit DIRECTLY INTO your VIC 20.

Now available at the new price.

**VICKITS NOW
AVAILABLE
ON CARTRIDGE**

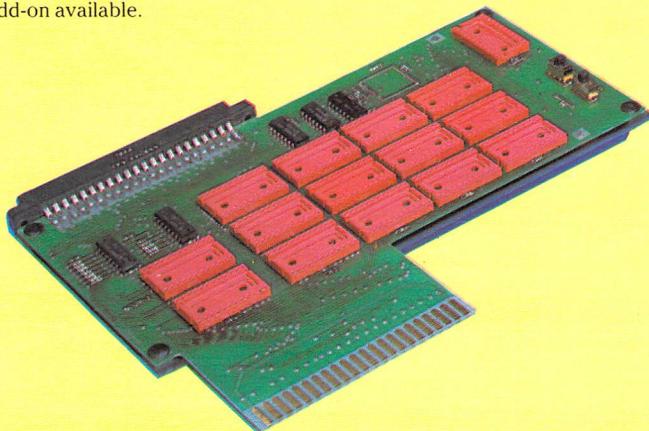


Order on pages 51 and 52.

4K RAM PACK (VS 0155)

8K RAM PACK (VS 0156)

These upgrade packs for the STOREBOARD are now DOWN IN PRICE, making the STOREBOARD the most economical memory add-on available.



8K STOREBOARD (VS 0154)

A totally expandable VIC-20 memory expansion system ... at a fraction of the cost you'd expect! Supplied with 8K fitted, the STOREBOARD allows you to build up the size of your VIC's memory whenever you NEED more memory or, whenever you can AFFORD it!

This means you get a FLEXIBLE system that SAVES YOU MONEY!!

* Upgrading your STOREBOARD is easy! Simply remove the detachable cover and pop in the clips supplied with Stacks 8K and 4K RAM PACKS.

* ADDED FEATURE!! A socket is provided on STOREBOARDS to allow you to use Eproms or Roms in addition to your extra memory. Once again you can save \$\$\$'s by using VICKIT utility Roms on your STOREBOARD instead of more expensive cartridges.

VicTips

In the first issue of the VICSOFT catalog one of the VICTIPS showed how to produce high-resolution graphics on an unexpanded VIC. Unfortunately a few gremlins crept into this program somewhere between us and you. The correct (this time we are crossing everything) listing is reproduced here.

To draw a circle and straight line in high-resolution on an unexpanded VIC20.

```

10 REM SET HIRES SCREEN
15 POKE 36869, 240 OR 13
20 POKE 36864,18
30 POKE 36865,46
40 POKE 36866,16 OR 128
50 POKE 38687,32
60 POKE 52,28: POKE 56,28:
    CLR
70 FOR X=0 TO 225: POKE
    7680+X,X: POKE
    38400+X,0: NEXT
80 FOR X=5120 TO
    5120+256*8: POKE X,0:
    NEXT
190 RD=25: GOSUB600
195 Y1=0: Y2=110: X1=0:
    X2=110: GOSUB700
196 GOTO196
500 X% =X/8: Y% =Y/8:
    P=X%+Y%*16+7680:
    CP=PEEK(P)
510 CH=5120+CP*8+
    (Y-Y%*8): POKECH, PEEK
    (CH) OR (2†(7-(XAND7))): RETURN
600 REM DRAW A CIRCLE
610 FOR Z=0 TO 6.28 STEP .03:
    X=COS(Z)*RD+64:
    Y=SIN(Z)*RD*1.7+64:
    GOSUB500: NEXT RETURN
700 M=(Y2-Y1)/(X2-X1):
    FOR X=X1 TO X2:
        Y=M*X+C: GOSUB500:
    NEXT: RETURN
    LINES 500-510 PLOT A POINT
    (DOT)
610 DRAWS A CIRCLE
700 DRAWS A STRAIGHT
    LINE

```

PLEASE NOTE THAT THE SPACES IN THE PROGRAM LISTING ARE FOR CLARITY ONLY AND SHOULD NOT BE TYPED IN.

NEW CASSETTE PRODUCTS FROM COMMODORE

Coming in June

EMMET ATTACK (VS 2205)

FOR THE UNEXPANDED

VIC 20

You are sitting in a bunker on an alien planet. The EMMETS are approaching, hiding behind the mountains to escape your guns. You must locate and destroy them before they reach the bunker. An excellent machine code cassette program creating the illusion of 3D when you fire your laser guns.

SNOWMEN (VS 3423) REQUIRES 3, 8 OR 16K RAM EXPANSION

Two players are racing each other to build a snowman. You can build your snowman first by answering mathematical questions rapidly and accurately. Make a mistake and more snow falls on the other snowman! By setting the appropriate degree of difficulty and choosing either addition or multiplication questions separately for each player, a highly competitive game may be played. Thus parent and child, two children of different ages or two children of the same age can complete with equal chance of success. As an extra bonus the Maths Maze program is included on this cassette.

NEW CASSETTE MULTIPACKS
FROM COMMODORE

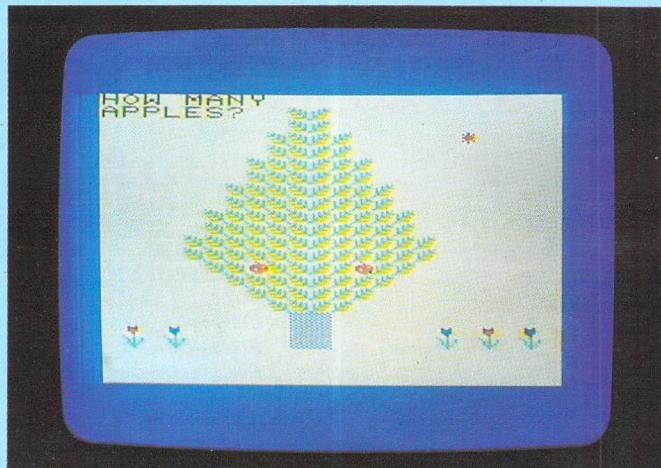
Great value
for money

TAKE ADVANTAGE OF THESE NEW MULTIPACKS AND SAVE MONEY. EITHER THREE EDUCATIONAL OR TWO GAMES CASSETTES WITH TWO OR MORE PROGRAMS RECORDED ON EACH CASSETTE MAKES THIS OFFER VERY ATTRACTIVE. SOME OF THE PROGRAMS HAVE BEEN MARKETED SEPARATELY; SOME HAVE BEEN PRODUCED SPECIALLY FOR THE MULTIPAKS. CHECK THAT YOU HAVE THE REQUIRED EXPANSION.

JUNIOR MATHS FUN SERIES 1 (4-8 YEAR OLDS) (VS 2421) REQUIRES 3, 8 OR 16K RAM EXPANSION

Three cassettes containing six maths programs especially designed for children in the 4 to 8 years age range. Each uses the VIC's excellent colour graphics and sound attributes to exercise the child's numeracy skills in a fresh and exciting way. Programs cover basic counting abilities and simple addition and subtraction. The programs contained in this pack are:

1. Tengreenbottles
2. Birds
3. Appletree
4. Oneman went to mow
5. Fishtank
6. Steamtrain



Order on pages 51 and 52.

JUNIOR MATHS FUN SERIES 2

(7-11 YEAR OLDS) (VS 2422)

REQUIRES 3,8 OR 16K RAM

EXPANSION

For the slightly older age group these six programs are designed to test your child's progress in mathematics. Again the colour graphics and sound of the VIC are used to enhance the programs and retain the child's interest whilst learning. The programs contained in this pack include Engine Shed, Lighthouse and Subtraction and three others.

GAMES MULTIPAK 1 (VS 2521)

REQUIRES 8 OR 16K RAM

EXPANSION

This two cassette games pack contains four games as follows.

Chinamen

A "board" game for one or two players. Six Chinamen appear in opposite corners of the screen. "Throw" the computerised dice to determine how many squares you can move. Your objective is to trap the opponent's men so they cannot move. Play against the computer or a friend. A challenging game with outstanding graphics.

African Beads

A strategic game for one or two players. Move the beads from the top row into the buckets so that all your beads are in the last bucket ahead of your opponent. Play against the computer or a friend and enjoy a challenging game.

Panzer Duel

A duel between two tanks shooting at each other over a hill. Get the trajectory and velocity right but don't forget to allow for the wind which changes with every shot. A game for two players pitting their skills against each other to survive bombardment and demolish the opposing tank.

Ghost Driver

You are driving your car in nightmare conditions. On a winding road, you are going the wrong way and must stay on the road avoiding the oncoming traffic. The density of the traffic can be increased to make a most difficult and enjoyable game. At the end of the game you are informed of the number of cars you destroyed in your journey and your ability as a driver.

GAMES MULTIPAK 2 (VS 2522)

REQUIRES 3,8 OR 16K RAM

EXPANSION

Another two cassette pack offering four new games.

Blokkit

A computer adaptation of a traditional board game. Compete against the computer to arrange five blocks together in a row vertically, horizontally or diagonally. At the same time make sure the computer does not win by blocking its attempts to achieve five blocks in a row. Thought provoking and absorbing, this is a game for all ages.

Cannon Shoot

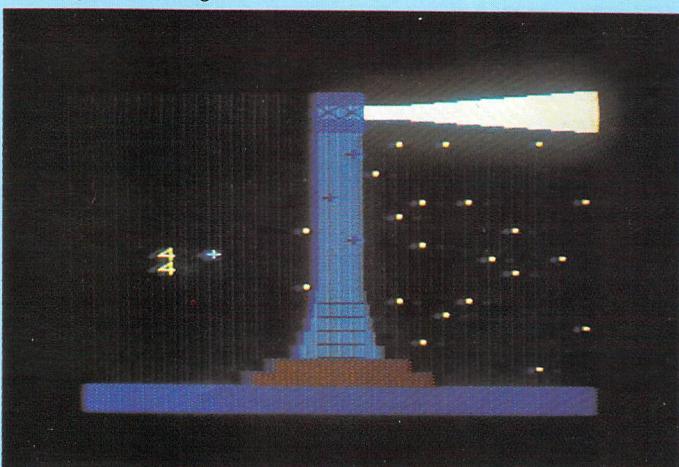
Try to get your shot through the hole in the intervening wall and demolish your opponent's cannon. Adjust the power and angle of your shot to get on target but don't forget to increase the angle as you decrease the power. The positions of the cannons and the hole in the wall changes for subsequent games.

Road Ralley

Drive your car through winding lanes for as long as possible without hitting the verges. Reduce the width of the track to increase the difficulty as your skill increases. A game for those with quick reactions and high manual skills.

Skittles

A traditional skittle alley game to be played by up to three players. Offering several variations in methods of play and scoring this game requires skill to project the ball at precisely the right moment for maximum effect.





INTERCEPTOR MICROS

FROG (VS 0641)

An amazing version of Frogger in the unexpanded VIC 20. With diving turtles and plenty of vehicles to run you down. Fast action and Hi-resolution graphics. Joystick or Keyboard control. Well, first you have to cross the busy main road, avoiding being knocked down or 'squashed' by the traffic. Once the road has been crossed you can hop up and down the centre reservation before jumping over the turtles and onto the various logs. Once over the logs then hop into one of the 'frog docking stations' at the far side, spelling out the word * FROG * in the process.

A bonus of 2,500 points is awarded each time you spell out * FROG *. Warning When the turtles turn blue they are about to dive and so should not be hopped upon. 30 seconds time limit per frog. Good luck and happy hopping!

VIC RESCUE (VS 0642)

Your planet is under attack by a 4th dimension and your only escape is by lunar pod to the Mother Ship. However you must first dodge your way through the asteroid belt and onto the landing pad before returning home. Keyboard or Joystick control. High-Res graphics.

The idea of the game is to release the emergency pod from the mother ship by pressing the fire button. Once released your mission is clear; rescue the six stranded humans from the

doomed planet. First dodge through the asteroid belts to land on a suitable platform. One man can be carried at a time, you then have to shoot your way through the hostile alien crafts to return safely to your mother ship. If you fail on the way up then you destroy a man and one emergency pod. There are three pods and six men. If all six are successfully rescued then a bonus is given.

ALIEN ATTACK (VS 0643)

You are under attack from an immense force. This program has various waves for you to battle against giving an extra-terrestrial experience for any adventurous human being.

Wave 1 – Alien attack

You are under attack from eight attack waves of aliens. Blast as many as you can before they pass and wave 2 commences.

Wave 2 – Mother ship

Your aim is to destroy the aliens which are embedded in the landing space craft.

No points are given for destroying the ship, but they are for shooting the Green aliens inside it.

Wave 3 – Asteroids

This wave is based on the skill of the players. Your lazer base has come under attack by a meteor storm, and the only way to survive is to dodge in and out of the asteroids to freedom. You cannot shoot the meteors.

Controls left and right only.

You have three lazer bases and if you complete all three waves without losing all of them then the sequence repeats itself. But this time much faster until it's just outright impossible.

FANTAZIA (VS 0647)

Star Wars was never like this. You are being invaded by the ultimate alien force to create a most entertaining game of Fantazia. The enemy are coming in from all angles in some of the most amazing formations.

The end of civilisation is near and the only way out is in your hands. May the fear be in you!! High-Res colour graphics.

You have been invaded by the beings from the planet Interceptor. The basis of the game is to zap!! the aggressors while they fly in formation and drop lazer pods on your planet. There are three waves, starting with cyan then green and finally yellow aggressors.

You have three lazer bases, a high score is kept on screen.



GALAXIANS (VS 0644)

This is the most amazing alien game ever seen on the VIC 20. Galaxians swarming in attack formation to destroy your planet. The nearest program to the real arcade game, for the unexpanded VIC 20.

The idea is for you with your three lazer bases, to destroy as many of the marauding GALAXIANS as you can. They appear in formation and swoop randomly to destroy your lazer base.

Beware of the explosive material which they release or you will meet a tragic end.

The game constantly displays a high score at the centre top of the screen.

CRAZY KONG (VS 0646)

The ape has captured Mario the carpenter's girlfriend and has taken her to the top of a steel fortress. You must get Mario to the top to save her!! But, as he runs across the girders and up the ladders, the ape throws barrels and the custard pies to get to the top and rescue his girlfriend. As you complete each wave the next gets increasingly difficult.

PENNY SLOT (VS 0645)

This game is designed around the fruit machine and gives true life animated action. Try your luck and win a fortune. With Hold and Nudge features.



VicSoft

RABBIT SOFTWARE

ADVENTURE PACK 1 (VS 0273)

MOON BASE ALPHA

COMPUTER ADVENTURE

Playing Instructions.

Adventures are interactive fantasies in which you play the role of a character in an unknown environment. Through the computer, you control your

character and try to solve the mystery with plain English statements like "OPEN THE GATE" or "GET THE KEY".

The computer considers the first word the verb and the last word the noun. It also only looks at the first two letters of each word. Therefore "OP GA" means the

same as "OPEN THE GATE". Enter "IN" for "inventory") to see what you are carrying. Look at individual items for further clues.

In all of our adventures, you will never get into a "dead end" situation; there is always a way out (unless you die).

VicTips

Here at VICSOFT we have been getting a vast number of questions about memory expansion.

Questions like 'Can I use my Super Expander Cartridge for programs which need 3K RAM?', 'I have a 8K RAM pack, why won't the programs I buy that need 3K work with them?', 'Why do I need to remove all my RAM packs to run an unexpanded program?' etc. etc.

At last here is what we hope will prove to be the definitive answer to all your questions about memory expansions. Our thanks go to Mike Todd of ICPUG (Independent Commodore Products Users Group) for the technical details (POKE and SYS values) used in this section. For more information about ICPUG or for membership please contact: Jack Cohen, 30 Brancaster Road, Newbury Park, Ilford, Essex IG2 7EP tel. 01-597-1229.

Running programs for 3K in 8K or more

Most of the programs written for a 3K pack will NOT work in an 8K pack even after altering the memory configuration (see below), this is because they use machine code which needs to be in specific memory locations. However the software authors are aware of this problem and are attempting wherever possible to alter their programs to run in any memory greater than the minimum requirement.

Unexpanded programs and RAM expansion

Programs written for an unexpanded VIC20 also fail to work if the VIC has been expanded, there is a solution to this, which is, before loading the main program type in the following (replace the X, Y and Z with the values in the line below):-

POKE641,0: POKE642,X:
POKE643,0: POKE644,Y:
POKE648,Z: SYS64824

Where X=16, Y=30, Z=30

This will convert any VIC memory configuration to the unexpanded configuration, without the need to remove your RAM pack(s) each time. If you own a motherboard or other expansion system which enables you to have more than one RAM pack connected at once or has more than the equivalent of one RAM pack try the following values of X, Y and Z.

X	Y	Z	GIVES
(642)	(644)	(648)	MEMORY
16	30	30	UNEXPANDED
4	30	30	+3K*
18	64	16	+8K
18	96	16	+16K
18	128	16	+24K

*3K expansion simulation is only possible if a 3K RAM pack or Super Expander is present.

Note:- It is possible although very silly to fool the VIC into thinking that there is more memory available than is actually present. Try setting up the 24K expansion on an unexpanded VIC. Any but the simplest programs run with this sort of 'memory enhancement' will crash sooner or later (usually sooner).

RABBIT SOFTWARE

KRELL (VS 0267)

Your mission is to defend the poor Zymwatts from the evil Tharg which sends energy bolts against their brick defences. You must destroy the Tharg before he kills all the Zymwatts. All is not so easy as that, for to get at the dreaded Tharg you must fend off his guardians!

ORBIS (VS 0268)

Defend your uranium fuel dumps from the dreaded Zylons by laying space-mines in their path as they slip through the energy shield. But be careful as you only have a limited number of mines.

ALIEN SOCCER (VS 0269)

So you think that you can play football. By earthly standards, maybe, but you just try against the wierdest football team you shall ever see in your life!

ANNIHILATOR (VS 0270)

Patrol the rocky terrain of a distant planetoid defending the humanoids from the clutches of the hovering Landers but watch out for the maniacal Baiters, Bombers, Pods, and Swarmers.

GALACTIC CROSSFIRE (VS 0271)

Deadly Sligon Phasers are above and below you hiding behind desert bushes, slowly advancing, firing at your land-craft as you cross the rugged terrain. You must be swift and deadly accurate to survive.

QUACKERS (VS 0272)

Step right up! ... Welcome to the shooting gallery. Try your luck and win a cuddly teddy bear for the little lady! Shoot the ducks and rabbits and then keep the turtle hopping to win a super prize!



VicSoft

IMAGINE

ARCADIA

The name of the game especially created to be the fastest, meanest, most addictive shoot 'em up game you've ever desired. Wave after wave of the most loathsome and deadly aliens billow hypnotically towards your space fighter with deadly intent. But then you have dual Plasma Disruptors and an Ion Thrust Drive haven't you? 100% machine code with eight different alien types, smooth hires multicolour graphics and animation, narrow playfield and sensational sound effects.

Keyboard or joystick.

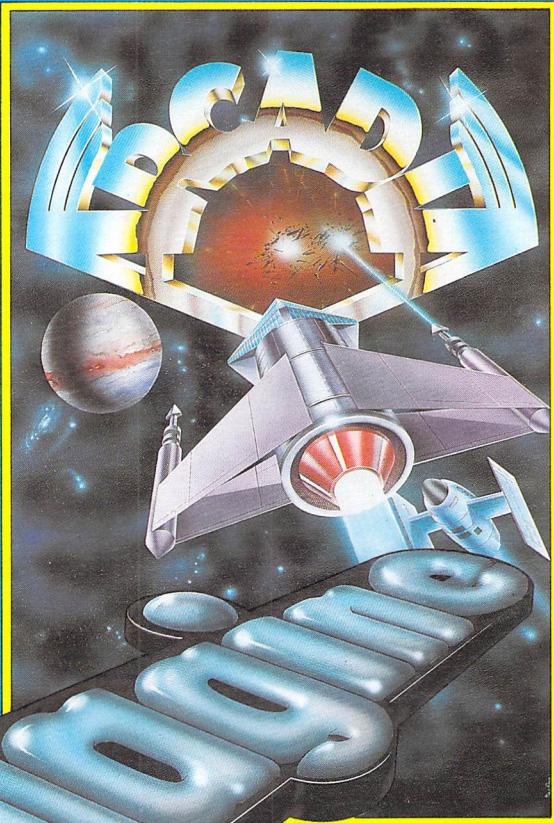
VIC-20 (and memory size)

Game design and software by
D. H. Lawson.

ONLY **£5.50**
EACH



(VS 0675)



**..the name
of the game**

Order on pages 51 and 52.

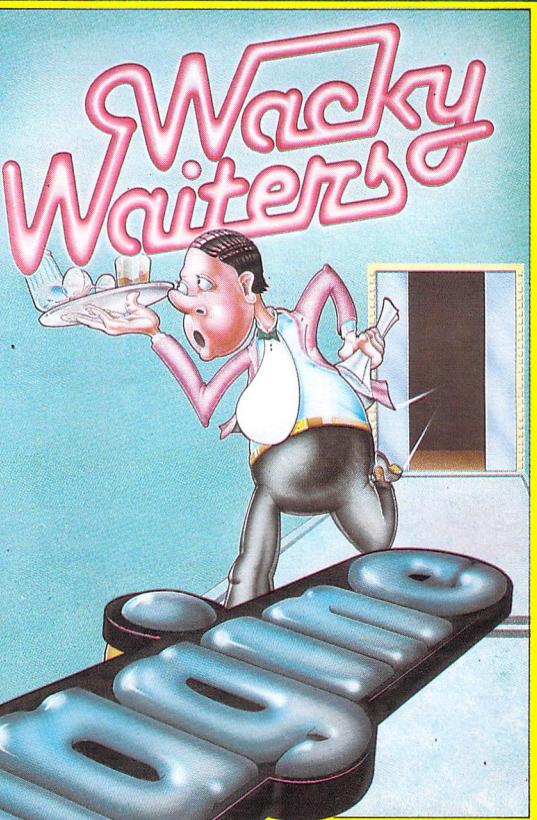
IMAGINE

WACKY WAITERS

The wildest, zaniest way of earning a fast buck. With crazy guests screaming for service you're gonna have to be quick to pick up the tips, don't slop the drinks, as you dodge the drunks and dart from elevator to elevator, coz if the Boss man spots you, you gonna be out on your but. 100% machine code, incredible animation, super smooth hi-res multicolour graphics, authentic sound effects and special playfield. Keyboard or joystick control. Yet another high performance Arcade quality experience. For any Commodore Vic-20.

Game design and software by Eugene Evans.

ONLY £5.50 EACH



..the name
of the game

(VS 0676)

Order on pages 51 and 52.

VicSoft

IMAGINE

FRANTIC

Your visor shows a visually breathtaking view, a near blur of speed as you plummet towards the centre of the moons of spectrum, pulled through by the draw of the gravitational field with only a standard anti-grav jet pack to withstand the pull. Only tales exist to describe the formidable band of aliens awaiting you in the depths, tales of the hurtle-beast and many more which exist. At hand you have the very latest mining equipment, 2-way radar indicates approaching aliens from above, below and all round you, an anti-inhabitant laser and of course your trusty jet pack.

Frantic the rock asylum that will send you frantic.

This 100% machine code experience presents you with a near infinite number of levels, various mythical aliens, and a sense-around radar. Including the sort of full colour, smooth Hi-res graphics and sound, you have come to expect from Imagine games.

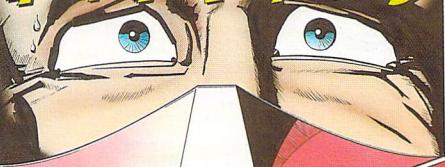
Keyboard or joystick control on any Vic-20.

Game design and software by Eugene Evans.

ONLY **£5.50** EACH

MORE ALIENS!!!
I MUST.. SLOWDOWN.. SPIN.. AIM.. SHOOT..
DON'T PANIC!

FRANTIC



**..the name
of the game**

(VS 0678)

Order on pages 51 and 52.

IMAGINE

CATCHA SNATCHA

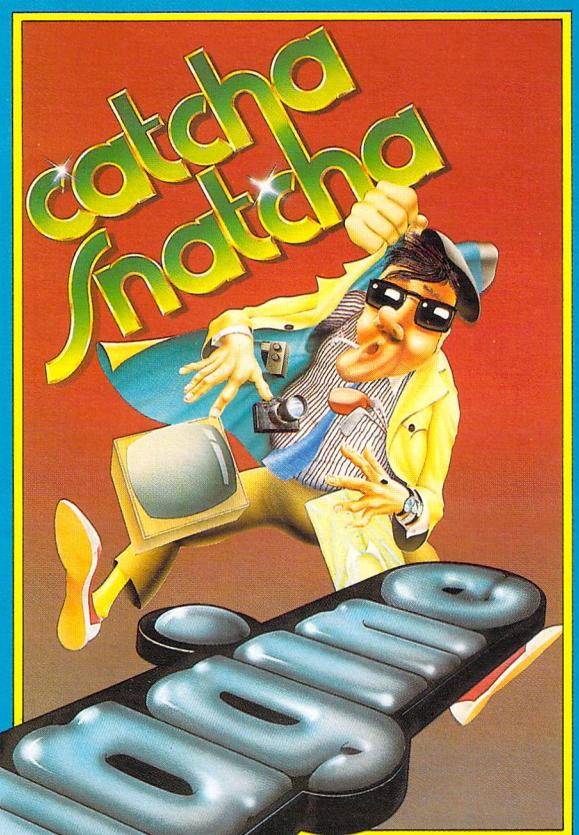
Barney booflace never had it so bad, demoted from ace detective of the aristocracy to the level of a mere store detective he wanders his now well worn beat around the jewellery and watch counters considering his predicament, it's a hectic life for the hardened crime fighter when he has to look after lost children and return valuable umbrellas and handbags to the lost property office. Of course one can expect the occasional bungling shoplifters or a planted bomb to add to the fun and excitement.

CATCHA SNATCHA brings to your TV screen the mad, mad world of the store detective in what has to be the most chaotic super store ever built with hordes of harassed housewives doing their weekly shopping. And you just wait till the late-night shopping starts.

CATCHA SNATCHA features smooth Hi-Res multicoloured graphics, sound, multiple playfields and a real time clock. 100% machine code. Keyboard or joystick.

Game design and software by Eugene Evans.
For any Commodore Vic-20.

ONLY £5.50 EACH



..the name
of the game

(VS 0677)

VicSoft

ROMIK

"ROMIK SOFTWARE"

Britain's leading independent computer games producer introduce our machine code, arcade quality games to you for the first time in VIC-SOFT. Every Romik Action Game purchased gives you automatic entry into the world wide competition to find the Romik world champion, with first prize worth up to £5,000. Entry to the competition closes on June 28th. Every game can be played with joystick, or simple keyboard controls.

MIND TWISTERS (VS 0583)

For the VIC 20 unexpanded

A compendium of 4 games on one tape, all fun to play and educational.

1. BLACK JACK. You start with £1,000 the objective of the game is to amass £20,000 and break the bank.
2. DECIPHER. An advanced version of Mastermind.
3. FOUR THOUGHT. A computer version of Cross Four.
4. TEASER. The aim of the game is to score 15 before the computer does, using any combination of three boxes.

ATOM SMASHER (VS 0590)

For the VIC 20 unexpanded

Our newest game, is an exciting game with many starting skill levels. The object of the game is to shoot out the Proton that moves around the Neutron, whilst avoiding colliding with, or shooting the Electron. If you take too long shooting the Proton, masses of volatile particles approach the Neutron, these particles can be shot away, or their advance stopped by shooting the Proton, if the particles reach the Neutron, it's the end!!

SPACE ATTACK (VS 0585)

FOR THE EXPANDED VIC 20.

Extremely good graphics, and 3 starting skill levels.

There are 4 different waves of different Alien Space Ships, which attack you (as the pilot of an Inter Galactic Battleship) with increasing speed and ferocity, each wave coming faster than the last, and shoot in up to three different directions as they attack, making dodging them extremely difficult, you more or less have to keep firing and moving all the time.

MOONS OF JUPITER (VS 0586)

For the VIC 20 unexpanded

By Dave Byrden.

Will run in 3K and/or 8K and/or 16K. Absolutely brilliant action and graphics, with 3 skill levels. The game is similar in concept to Asteroids, but with better action and graphics. You have to shoot the moons which break up into smaller fragments, which you also have to shoot, and yet again they will break up, all the time coming at you from different directions and at different speeds, watch out for the UFO's, but even more deadly are the Gologs, these you cannot shoot, you have to lure them into the moons to destroy them. You start with 5 lives, and gain one additional life each time you clear the screen. Uses joystick or easy to use keyboard controls.

MULTISOUND SYNTHESIZER (VS 0584)

FOR THE UNEXPANDED VIC 20. By Darren Hall.

The synthesizer is split into four main sections.

1/ Normal 2/ normal with drum 3/ programmable background music 4/ white noise.

Each section is accessed by pressing one of the four function keys. Music can be played like a normal organ or synthesizer by using the 2 rows of keys "Q" to "*" and "A" to "="". By pressing certain keys, different harmonics and sound effects may be created. Up to 4 tunes of up to 255 notes each can be created as background music, and can be saved to tape for reloading at a later date. A background tune plus the drum beat (choice of 6) can be played together, and at the same time you can play another tune over the top. The rhythm can be speeded up or slowed down etc. etc. etc.



Order on pages 51 and 52.

ROMIK

SEA INVASION (VS 0582)

FOR THE UNEXPANDED

VIC 20. By Cliff Ramshaw.

Similar in concept to "SPACE INVADERS" but much better in many respects. There are five skill levels: 1/ beginner 2/ trainee 3/ semi-professional 4/ professional 5/ ace; so no matter how fast or slow your reflexes are there is a speed to match your skill. Unlike Space Invaders, the creatures do not move left to right then right etc., but move off the right of the screen and come back from the left. So there is no safe place to hide.

POWER BLASTER (VS 0588)

For the VIC 20 unexpanded.

The year is 2001, the universe has been ravaged by many wars. You are the Commander of a Venusian Defence Force Patrol ship, your mission is to blast away the remote control high power bombs which are being planted by the Martian overlord's personal attack force ...

SHARK ATTACK (VS 0580)

FOR THE UNEXPANDED

VIC 20. By Cliff Ramshaw.

You have only three lives. You are in shark infested waters after being thrown overboard from a pirate ship. Your only protection being an atomic net which you trail behind you. Trying to trap the sharks (hopefully all together) and proceed to fill the screen with the net. If you stop, or cover your tracks for too long the sharks will escape and come after you. Each time you fill the screen with your net, the screen will clear, two octopi will appear, and the sharks will increase their ferocity of attack. Each additional time that you fill the screen two extra octopi will appear, and the sharks will grow more ferocious.

SPACE FORTRESS (VS 0587)

FOR THE UNEXPANDED

VIC 20. By Darren Hall.

Brilliant action and clean very attractive graphics, and absolutely amazing sound effects and probably the best game for the VIC 20 from any manufacturer to date. There are 20 skill levels. But you always start at skill level one. First of all you are attacked by 3 waves of the suicide squad, then 3 waves of Sidewinders then 3 waves of Sistorian Swoopers finally you are attacked by the Purple Avengers. All these different deadly defence forces attack you using different methods of attack. After you have destroyed the last wave of Purple Avengers, the Space Fortress appears, this you have to shoot down before it puts up its defence shields and disappears into hyperspace. If you shoot it down you advance to the next skill level. If you fail, you go back to the skill level that you were on. Each time you destroy the Fortress you gain an additional life (you start with 5).

MARTIAN RAIDER (VS 0581)

For the VIC 20 unexpanded

By Cliff Ramshaw.

(Our top selling game) for the unexpanded VIC 20.

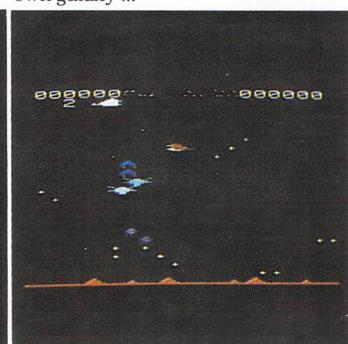
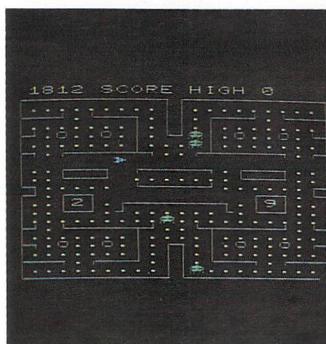
You are the pilot of an intergalactic battle ship. Your mission is to bomb the cities, ammunition dumps, and ground to air missiles of the evil Martian overlords. Attacking you are the U.F.O's, meteorite storms, and the ground to air missiles, all of which (if you are quick enough) you can shoot down. You have a limited time to complete your mission, but this time is extended each time you hit an ammunition dump. If you lose one of your three lives (a bonus life is awarded at 10,000 points). You will get additional time with the new life. There are several different screens which advance automatically during play. Superb graphics and action.

TIME DESTROYERS (VS 0589)

FOR THE EXPANDED

VIC 20 +3K, or +8K, or +16K.

You are the Commander of a fleet of destroyers, your mission is to save the universe from being disintegrated by the Vortenians, a race of Aliens from a distant galaxy, who have found a way of destroying the space/time continuum, without affecting their own galaxy ...





LLAMA SOFT

ANDES ATTACK (VS 0547)

GAME PLAY

As a star Warrior of the Galactic Fleet, your mission is to protect Llamas in the Andes who are under merciless attack by the Alien Xygar Life Forms which use their advanced technology to mutate captured Llamas into Cybernetic Death Machines. During your defence, you will come under attack by many different spacecraft.

GRIDRUNNER (VS 0545)

In the year 2190, the human race has set up a huge solar-power collecting power station in earth orbit to beam power down to earth. Because of its lattice-like shape, this power station is known simply as 'THE GRID'. Shortly after beginning operation, the grid was found to be delivering less power than predicted.

Investigation teams were sent into orbit. They discovered that the grid had been invaded by alien Droids, who were using its power to reproduce themselves, massing for an invasion of Earth. To combat the Droids, a special combat ship was developed. Small and incredibly manoeuvrable, the ship drew its power from the grid and, with such vast amounts of energy readily available, was able to carry an awesomely powerful plasma cannon.

This ship, known as the GRIDRUNNER, was so fast and powerful that, with skilful control, it could annihilate vast amounts of hostile Droids.

TRAXX (VS 0548)

The object of Traxx is to capture boxes on the grid until the whole grid is red. You will be pursued by 1 to 9 Evil Bugs. Capturing 4 corner squares allows you to eat Bugs for bonus points. Capture squares by leading red trace around square using your space ship. Trace disappears if you backtrack or fail to connect with more red within 3 track lengths. 81 skill levels and 1/2 player options selectable by F-keys.

ABDUCTOR (VS 0546)

After many years of intergalactic tension the attack has finally come. The Alien Nasties, however are not attacking with huge starships as predicted by Humanoid experts. They have sent thousands of tiny robot ships to decimate the Humanoid population. You are a Humanoid in charge of a mark One Plasma Cannon. You have size Humanoids under your protection and the attack is about to begin! If you can just survive until the fourth wave you will be given a Mark 2 stage on the base of your Mark One Cannon, allowing you to fire more rapidly. But now, beware! There are four Abductor ships in the upper atmosphere flying in crazy loops that would put the Red Arrows to shame ... and your Humanoids are looking worried. Get blasting!



KILLER BYTE

KILLER BYTE PACK 1 (VS 0626)

3D MAZE

You must enter your maze and then try and get out of it. You are given a rats eye view of the maze showing the walls of the maze.

GUN FIGHT

You must control the man on the right to hit the man on the left. You have 10 bullets each and if you both run out of bullets it is a draw.

LANDER

You must control your spaceship to land on the flat ground of the plane. There is only one landing place and it is different each time.

ROCKS

You must control your spaceship in space to hit the moving rocks. After a while the rocks change to U.F.O's and you must hit these before they hit you.

KILLER BYTE PACK 2 (VS 0627)

CRAZY LADDERS

You must control your little man to ascend the ladders. Whilst doing this you must avoid being hit by the moving barrels. In the first level you must avoid the barrels then in the second after avoiding the barrels you must go up a moving ladder.

ROBOT ATTACK

You must control your little man to shoot the robots. You must shoot the robot that moves randomly in the room you are in. When he is dead you must go through the door that has opened avoiding the other robots (these can not be shot).

FIGHTER

Control the space fighter to dodge or fire at the alien spaceships, rockets and U.F.O's. You start off avoiding the planet surface and alien forces. Then the U.F.O's sway across towards you with the spaceships.

MISSILE

You must move your missile to near the U.F.O's then fire and try and guide your missile towards them to blow them up. But there are asteroids in the way so watch out.

KILLER BYTE PACK 3 (VS 0628)

CRAZY KONG

Control the jump man up the ladders to rescue the lady. You must jump over the fire and barrels and avoid Kong.

COPS & ROBBERS

Try and drive like the Dukes of Hazzard. You must twist and turn as the cops are hot on your heels.

COWBOYS & INDIANS

Defend the fort from the Indians. Kill the Indians and dodge the arrows to prevent the Indians capturing the fort.

RALLY

Control your car to go through the gaps between the cars, try not to crash. There are different levels of play.

KILLER BYTE PACK 4 (VS 0629)

FOOTBALL

Choose the number of players you want to play. The computer's team will stay only in its own half.

SUPER GUY

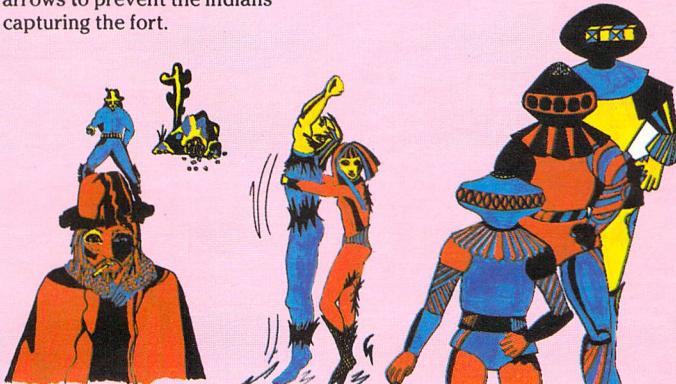
You will see Super Guy land, and then the game starts. Control Super Guy to dodge the falling objects and catch the falling woman.

ALIEN

Control your fighter to kill the alien force. First, kill the alien ships, then the alien, then the U.F.O's and finally land your spaceship for a Bonus.

SKI

Ski down the mountain, avoiding the log cabins, fir trees and flags. To score points you must go in between the flags.





SUMLOCK ELECTRONICS

JUMPIN' JACK (VS 0527)

Jumpin' Jack is a game written entirely in machine code and runs in the 3.5K of the un-expanded VIC 20.

Jumpin' Jack is a frog who has been out all night with his lady friend. It is now morning and you have to get him across the road and river to his home on the riverside bank. The route is full of dangers as the road traffic is very busy and the river is flowing fast. If he succeeds in negotiating the road he must hop from log to turtle until he is in his bay. The frog has three lives and the journey has to be successfully carried out five times filling all five bays which completes one stage.

SCRAMBLE (VS 0529)

Scramble is a game written entirely in machine code and runs in the 3.5K of the un-expanded VIC 20.

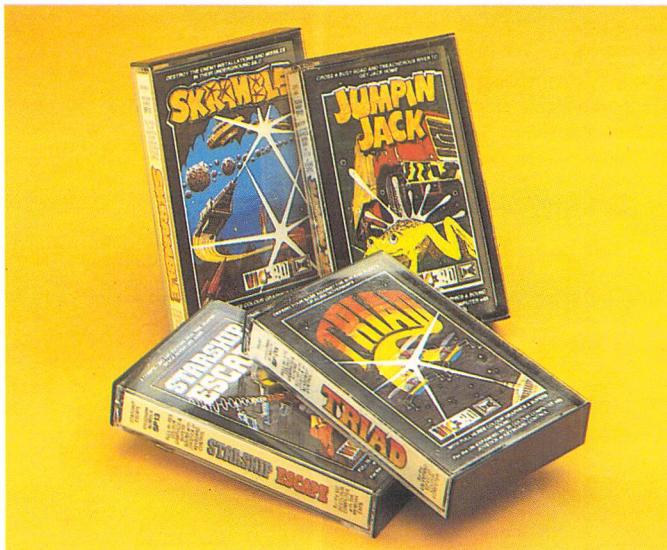
Your task is to pilot your aircraft into the enemy's underground silos and destroy as many of their ground installations and guided missile bases as possible. Your flight path takes you over rugged terrain and although it is dangerous your weapons are best deployed at low level.

STARSHIP ESCAPE (VS 0526)

THE ADVENTURE

You are the lonely pilot of a Federation stellar scout ship on a routine patrol. While travelling through a little known sector of the galaxy you are confronted by a gigantic starship with alien markings. Before you can take evasive action a powerful tractor beam draws your craft into the alien ship.

The Force Cloud Entity controlling the alien ship now disassembles your craft and distributes the parts into various rooms. Now your quest begins. You must move from room to room in search of each part, overcome the dangers awaiting there and bring the parts back one at a time to the airlock. When you have retrieved all of them you have to re-assemble the ship and make your escape.



TRIAD (VS 0528)

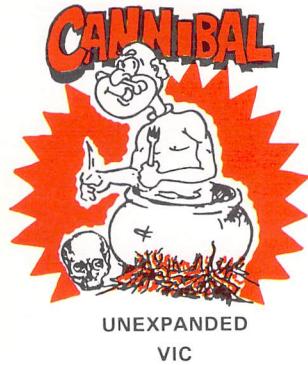
Triad is a game written entirely in machine code and runs in the 3-5K memory of the un-expanded VIC 20.

The game is a space battle and you will need fast and accurate control of your laser cannon to defend your base against a battlefleet of alien hoverships who continually dive in suicidal formation, dropping bombs and destroying your base.

VicSoft

SCRAMBLE (VS 0331)

How far can you invade the enemy defence system? You will have to dodge the deadly ground launched missiles on your way, and, as if that wasn't enough, look out for the planes and the rockets they launch! You will also need to refuel occasionally if you wish to stay alive for any length of time, and refuelling from an enemy fuel dump is a very tricky manoeuvre. Meanwhile it is also your duty to cause as much damage to the enemy as possible with your guns and bombs. So why on earth did you volunteer for this mission in the first place?!



Melbourne House

THE WIZARD AND THE PRINCESS: (VS 0372)

Your first task is to locate the castle of the Evil Wizard. The way to the castle is treacherous, and you must be careful not to step off the path, as otherwise you are sure to fall down the cliff. Once inside the castle gates, a ferocious fire-breathing dragon confronts you! The dragon is old and wily, and

VIC CHESS (VS 0332)
Superb Chess game with full colour graphics for the 16K VIC 20. 1,000 levels of play fast computer responses together with many options such as saving games on tape, setting up board for Chess problems etc. Castling and En-passant catered for.

BUG BYTE



YORKSHIRE MICRO

CANNIBAL — FOR THE UNEXPANDED VIC 20 (VS 0371)

"On cannibal island your aim is to find your way through the undergrowth devouring the coconuts and flashing squares to gain points. As you proceed you will find crosses which when touched turn the roaming cannibals blue so they can be eaten for bonus points otherwise they will eat you and you lose one of your five lives. If you enter the

many years of battle have toughened his skin against mere swordship.

You must risk being burned alive to reach the dragon and stab him in the throat.

VIC 20 GAMES PACK (VS 0370)

This cassette contains 5 exciting arcade games, designed for the standard VIC 20.
ALIEN BLITZ INVADERS STORM GROUND ATTACK SPACE ROCKS

clearing — beware the skull of death which stalks your every move. As your score increases so does the agility of the skull of death in his quest to devour you. To clear the screen by eating all the coconuts is possible before your fifth life has expired, however to clear the second screen is almost impossible!" This game uses either keyboard commands or a joystick and is suitable for both young and old players.



A.S.K.

ages
5 to 12

FACEMAKER
(VS 0226) Draw character faces – of your family, friends or enemies! See how they'd look with a beard, bald head, or droopy moustache.★★



ages
5 to 12

NUMBER GULPER
(VS 0235) Gulp numbers to make bigger numbers. Avoid the aliens, and try for 999!★★



ages
8 upwards

TWISTER (VS 0228) A tough sort of Rubik's Cube puzzle with up to 10 rows and columns of different coloured squares. Can you do it without the computer's help?★★



ages
5 to 12

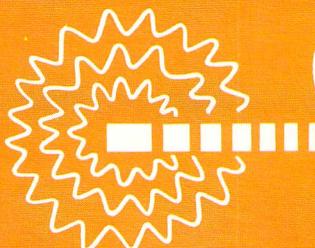
NUMBER PUZZLER
(VS 0237) Beat a friend or the computer at this 'noughts and crosses' type game with numbers. Try the magic number square and set yourself a number challenge.★

98	7	34
26	59	32
65	15	56
71	24	WIN!

ages
4 to 10

HIDE AND SEEK
(VS 0231) Hide things in boxes which then shut. Can you remember what's in each box? Challenge all memory levels.*

NEW



ages
5 to 8

WORDS WORDS WORDS (VS 0230) Use words to build up various pictures of places like a city or farm. Watch the butterfly fly, the chimney smoke. Link the scenes together yourself and create your own story.★★

NEW

ages
8 upwards

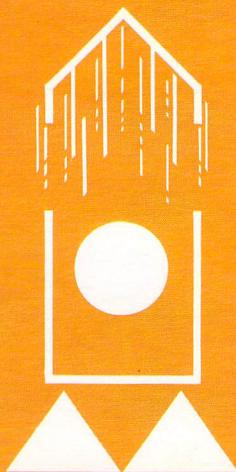
RAINBOW TOWERS
(VS 0236) Try and work out how to move the discs to the right towers – even when they change colour on each move. Difficult with 6 discs, but impossible with 18!★★

NEW



**ages 3
upwards**

SHAPE UP
(VS 0229) Learn to distinguish between various shapes and sizes. Use them to build a house, train or rocket (that actually takes off!)**



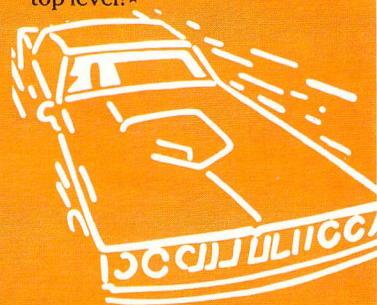
**ages 3
upwards**

WE WANT TO COUNT (VS 0225)
Match objects to objects and then to numbers. Guide the Rocket to the big matching number. Catch the right number of objects in the bucket.**

2345
4532
5243

ages 5 to 12

NUMBER CHASER
(VS 0227) Estimate a number and race your car towards it. See if you can make it at the top level!*



Programmes that combine educational challenge with computer generated fun! Developed by leading educators to help children learn and explore through games that teach and entertain. Each cassette comes in an attractive box together with a detailed Instruction Manual.

**Requires 16K Ram Pack
* Requires 8K or 16K Ram pack



QUICKSILVA

TORNADO (VS 0501)

The Red Planet slips beneath the ship's gleaming hull. Behind dust is kicked into the thin air from which it falls at an unnaturally fast rate, the sky shines palely behind. The ship is shaped like an arrow: thin and streamlined with small control and lift veins spread out at the back, it cuts the air ferociously at extreme speed, the air roaring as it's ripped in two.

This ship is a Tornado. A craft specially designed for use over the Red Planet able to manoeuvre fast and effectively in the thin atmosphere. Since the start of the Colony Wars ships such as these have been patrolling outlying areas and in some cases have had to destroy war-like clans which still held to the old ways of separation and destruction. Now the end of the Colony Wars is in sight, a final pocket of seething hate has been located and is about to be eradicated, the Last Clan will shortly fall... if the mission is successful...

The enemy strong-holds flip over the horizon in quick succession, you release your mercy bombs onto the unsuspecting machines of war destroying the resistance as you fly past. You know that somewhere enemy fighters are being prepared for launch and attack. Shortly the enemy will be air-borne and then your task will be doubly difficult... Meanwhile destruction blossoms all around, a necessary destruction. We cannot risk another Arctic Disaster; a significant proportion of the Earth's population died during that

attack by the Colony Clans... the earth's ecology may never recover again, much of the globe is still under water and new pockets of the killing Mutant Fire are discovered almost daily.

Suddenly a flight of attacking Colony Fighters leap over the peak of a small mountain and veer into my flight path. The pilots are safely on the ground in secure bunkers controlling the fighters remotely, sending them on kamikaze runs at me. I thrust into their midst firing... This is the crucial turning point of the battle... and the war hangs in a balance... I fire...

HARVESTER AND BRAINSTORM (VS 0502)

These two games run in the unexpanded VIC 20, however, to make the best use of the memory available, they are each in two parts.

The first gives full instructions for playing and defines the hi-res character set. The second is the game itself.

The characters and events depicted are based on The Trader Trilogy, the epic Pixel game.

Delta and Psi are two moons of the gas giant Meridien in the Altair system.

Psi is inhabited by amorphous hydrosilicon lifeforms that can communicate on a telepathic level.

On Delta, Boosterspice is farmed. It is a narcotic with unpredictable side effects and outlawed on most other planets. It is however relatively harmless and an essential part of the Deltan lifestyle.

TRADER (VS 0506)

Trader is a graphic adventure in 3 parts supplied in a box with a comprehensive booklet to guide traders in the Meridien system.



QUICKSILVA

PIXEL POWER (VS 0504)

A character generation for the VIC 20. Powerful tool for creating user definable characters on VIC 20 with 8K or more added RAM.



SUBSPACE STRIKER (VS 0505)

A telltale blip on the Realspace Sensorscan screen moves the crew of the Subspace Striker "Swordfish" to full battle alert.

A stream of data fills the screen giving a full target analysis. Class. Drive. Range. Speed. Armament.

As the "Swordfish" ripples into realspace existence, the moving target is already being lined up on the Targetscan using Up (+) and Down (-) keys on the control panel.

A ready finger hovers over the buttons marked 1 and 2.

Time seems to stand still as the first deadly Antimat torpedo streaks towards its target co-ordinates.

Suddenly a warning flashes across the screen . . . A Federation Sweeper is closing for counter attack. Fast.

A finger stabs the emergency dive button (D) and the subspace drive roars into action torturing the space/time continuum around the ship.

The sweeper fires.
Will we melt in time . . . ?

STARQUEST (VS 0503)

With Earth's natural resources approaching depletion, you are perched on the edge of adventure.

The massive interstellar exploration ship "Starquest" has been built with a new Hyperspace Transitional Drive.

Taking mere seconds to leap vast spatial distances of many light years, your objective is to find new Earth Type planets for colonisation.

You must also chart and claim any planets suitable for mining or having other exploitable resources.

Destination stars are selected on the navigation screen using the cursor keys. The Hyperdrive control (H) activates the automatic navigation sequence.

On starfall, the ship will drop out of hyperdrive enabling a sensorscan of any planetary system present.

Planetary excursion shuttle craft are used for landings. They are not equipped for meteor deflection so if you find yourself in a meteor storm, avoidance is your only hope.

No-one knows what you will find out there amidst the perils of deep space.

You may never see home again, but remember, we are depending on you . . . good luck.

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GLOSSARY OF TERMS

Here are some words you encounter in literature about your VIC. We'll publish more in each VICSOFT issue.

ARRAY A sequence of related variables that are accessed in matrix form.

ASSEMBLY LANGUAGE

A language designed to make the writing of machine code easier.

BASIC The most popular computer language that is the simplest to use and learn.

BIT Made up of Binary digit and is the term to describe 0's and 1's of binary code which the computer is able to understand.

BYTE A term to measure the number of BIT's — 8 BIT's to 1 BYTE. One BYTE is used for each character in a program including spaces.

BUG A slang term to indicate a mistake either in a program or a mechanical/electronic fault which prevents the program from working.

CHIP A term given (normally to the finished product) of a slice of silicon on which is etched all the components which make up an integrated circuit.

DISK A magnetic storage device which may be floppy disk or hard disk. A hard disk stores more information and is correspondingly more expensive.

GRAPHICS A name given to a character which is not a letter or a number.

HARDWARE A term which covers the general makeup of a computer, i.e. the machine itself and its components.

HIGH RESOLUTION A term to describe the facility of the micro-computer to be able to draw very fine lines between programmable points on the screen.

KILOBYTE A measurement of computer memory which is a 'binary thousand', i.e. 1024 bytes, so 5K is equivalent to 5120 (5 x 1024) bytes.

LOOP Refers to the repeated execution of a series of instructions for a given number of times.

MACHINE CODE The language that the heart of the processor uses. May be programmed directly in which case the program is very fast compared with BASIC.

MEMORY That area of the computer from which data or information can be stored and later extracted.

PEEK A BASIC statement which allows you to read the contents of a specific memory address.

PERIPHERALS That equipment other than the computer which can be linked with the computer, e.g. printers, disk drives and VDU's.

POKE An instruction commonly used in most versions of BASIC which allows you to store integers in a specific memory location.

RAM (Random Access Memory) A volatile memory chip which can be temporarily loaded with data. Memory is lost on switch off.

ROM (Read Only Memory) A non-volatile chip from which data can be read from and not written to. Does not lose its memory on switch off.

SOFTWARE A term which commonly refers to computer programs but may also refer to documentation.

